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THE ADMINISTRATION

OF THE

LOWER PROVINCES OF BENGAL

FROM 1882-83 TO 1886-87.

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BEING

A SUPPLEMENT

TO THE

ANNUAL GENERAL ADMINISTRATION REPORT

FOR 1885-86.

COMPILED BY

MR. G. A. GRIERSON,

BENGAL CIVIL SERVICE, ON SPECIAL DUTY

Calcutta:

PRINTED AT THE BENGAL SECRETARIAT PRESS.

1887.

Price Rs. 1-8.

CONTENTS.

	Page.
INTRODUCTION.	
Administrative Changes	1
Legislation	3
Political	5
Condition of the People—	
Census and Ethnological Survey	7
Meteorology	10
Economic History	10
Emigration	13
The Land—	
Agriculture and Horticulture	18
Surveys	22
Settlements	23
Government Estates	23
Wards' Estates	26
Forests	26
Prevention and Punishment of Crime—	
Police	27
Prisons	29
Administration of Justice—	
Criminal and Civil Justice	32
Registration	35
Local Self-Government—	
Municipal Administration and Local Self-Government	36
Port Trust of Calcutta	40
Production and Distribution—	
Manufactures and Mines	42
Calcutta Exhibition of 1883-84	44
Internal and Frontier Trade	45
Public Health—	
Vital Statistics	48
Sanitation	52
Vaccination	54
Medical Relief	55
Education—	
Education	57
Literature and the Press	61
Bengal Economic Museum and Zoological Gardens	61
Archæology	65
Public Works—	
Public Works	68
Roads and Buildings	69
Irrigation	74
Railway	80
Imperial Finance—	
Imperial Finance	82
Customs	83
Opium	84
Salt	87
Telegraph and Post Offices	88
Provincial Finance—	
Provincial Finance	89
Land Revenue	92
Excise	100
Road and Public Works Cesses	106
Assessed Taxes	106
Stamps	109
Conclusion	110

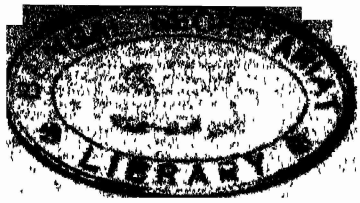
INTRODUCTION.

I HAD originally intended to combine with the Report on the Administration of the Lower Provinces for 1885-86, which was issued last February, a brief account of the leading features of my term of office as Lieutenant-Governor of Bengal. This term almost exactly coincides with the quinquennial period embraced by the financial years 1882-83 to 1886-87, and also with the currency of the Provincial financial contract of 1882. It was, however, found impossible to collect the materials for the year 1886-87 in time for the annual General Administration Report above referred to. Accordingly this note, drafted under my instructions, but which I have been unable to revise till I had resigned office, is now issued as a supplement to that report, in the hope that it may be of some use to my successor. The period under review has not been fortunate in the financial and agricultural prosperity which marked the preceding five years, but it has nevertheless been, I believe, five years of steady progress in all that makes for the permanent good of the people. The passing of the Bengal Tenancy Act alone is sufficient to mark the administration as one in which the first real effort was made to settle upon an equitable basis the relations between the landlords and the tenants in these Provinces; while the measures which come under the head of Local Self-Government have given to the people a much greater interest, and a considerable power, in the conduct of local affairs. The other reforms carried out, and the history of the progressive development which there has been in nearly every department, will be learned from the perusal of the following pages.

A. R. T.

SUEZ;

The 23rd April 1887.



THE ADMINISTRATION

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FROM 1882-83 TO 1886-87.

ADMINISTRATIVE CHANGES.

In 1882-83 an important scheme was prepared, which provided that admission to the Subordinate Executive Service should in future be by competitive examination. Attempts had been made in previous years to establish the competitive system in this branch of the public service. They had failed because regard was not had to the very small number of vacancies to be filled up each year; and when some 300 passed candidates had been entered on the lists for some 8 or 10 annual vacancies, it was found necessary to stop further examinations. The principle adopted in 1882-83 was to declare only the number of vacancies which would be open to competition. Thus six in the first year, and ten, twelve, and eight in the three following years, respectively, were competed for. As another special feature in the arrangements, the successful candidates were at once brought on to the list of the Subordinate Service and were deputed as Assistants to Commissioners and Collectors to learn their work. While so employed they receive a moderate subsistence allowance, and as vacancies arise they are appointed to them. It has generally happened that the passed candidates are all absorbed into the service a month or two before the new examination (which is held in January) commences, and thus an opportunity is afforded to the Lieutenant-Governor of making one or two direct appointments. This has its advantages. In the year 1884-85 a test of limited competition was introduced also amongst approved candidates for the Statutory Civil Service, and two gentlemen out of eighteen who competed received appointments. A similar system was adopted for the selection of candidates for three out of four existing vacancies in the Opium Department. To the fourth vacancy a native gentleman was appointed; and, finally, rules for the admission of natives of India to the higher grades of this Department by selection were published in 1886-87.

The Contagious Diseases Act, XIV of 1868, was, at the instance of the Secretary of State and the Government of India, wholly withdrawn from the town of Calcutta from the 15th March 1883 as an experimental measure. It had previously been confined to the southern portion of the town, where it was being worked avowedly in the interests of the European sailors and the garrison of Fort William. This arrangement was found to have broken down as a practical measure of protection, and it was felt that the position which had been arrived at was logically indefensible and could not be longer maintained. The

two lock hospitals have, however, been retained as voluntary institutions for the cure of persons who present themselves for treatment of their own accord, and they have been freely resorted to.

A Burial Board was established during the same year for the better management of the chief cemeteries in Calcutta, the control of which was transferred to them.

A proposal was referred to this Government by the Government of India for relieving Collectors of districts in the Orissa Division of work connected with the manufacture and sale of excise salt, and for transferring their duties in this respect to the Commissioner of Salt Revenue, Madras. The principle was accepted by this Government in 1883-84, and the transfer was finally accomplished in 1885-86. Improvement in the administration of the salt revenue is expected to result from the change.

Sanction having been obtained to the appointment as an experimental measure for two years of a special officer to advise the Local Government on matters relating to agriculture and statistics, to undertake preliminary inquiries in connection with the experimental cadastral survey in the Patná Division, and to assist in giving detailed information in regard to the creation of a local agency of record of rights in Wards' and Government estates, the post of Director of the Agricultural Department, Bengal, was created in December 1884. This period of two years expired at the end of 1886, and the experience of the working of this Department having shown that it was of great use, and that its maintenance was necessary for settlement purposes, the Lieutenant-Governor has recommended to the Government of India that it should be permanently sanctioned.

The passing of Act III (B.C.) of 1885, which extended local self-government over a large portion of these Provinces, caused a considerable number of local changes of administration. The Act provided for the establishment of District and Local Boards, having extensive powers and duties in regard to roads and communications, hospitals and dispensaries, sanitation, vaccination, famine relief, taking of census, maintenance of staging bungalows, holding of fairs and exhibitions, and other matters of public interest and utility. Powers have also been given to them to construct and maintain tramways, railways, and water-works, and to take charge of, and construct, public buildings on behalf of Government. The rules made under the Act provided for the transfer to the District Boards of the allotments for primary education and scholarships within the area under their control; of the grant-in-aid allotment for certain classes of schools; and of the net grants to all Government schools that are placed under the direct management of the Board.

Important concessions have been made regarding the salaries of subordinate Government officials during the period under review. In June 1882 a revised scale of establishment for the Subordinate Judicial Service was sanctioned at an extra annual cost of over a lákh of rupees per annum. Under the new arrangement the pay of the lowest grade was raised from Rs. 150 to Rs. 200 per mensem, and the number of higher grade appointments for Munsiffs was largely increased. The gradation of the service was thus so arranged as to give an officer fairly rapid promotion to a higher grade. A similar improvement in the prospects of the Subordinate Executive Service was carried out

in July of the same year. The pay of the lower grades of Deputy and Subordinate Deputy Collectors was raised, and the gradation was so arranged as to offer better prospects of promotion. On the 21st March 1885 a Commission was appointed to revise the salaries of ministerial officers and to reorganise the system of business in executive offices. It sat during the year 1885-86, and its report, submitted in August 1886, has recently come under review.

LEGISLATION.

In all twenty new Acts have been passed since April 1882. Amongst the more important ones may be cursorily mentioned the Bengal Tramways Act, the Jute Warehouse and Fire-brigade Act, an Act to regulate ferries in Bengal, an Act to enable the Commissioners for the Port of Calcutta to provide docks, an Act further to amend the Village Chaukídárí Act, 1870, an Act to amend the Municipal Act, 1876, an Act to provide for a survey of the Town of Calcutta, an Act creating a port trust at Chittagong, an Act to regulate the rural police of Chutiá Nágpur, and one to amend the Calcutta Port Improvement Act of 1870, by which the power to elect members of the Port Commission is given to the Chamber of Commerce, the Trades' Association and the Municipality of Calcutta.

The Bengal Tramways Act was passed to enable Government to sanction, and local authorities or private persons to undertake, the construction and maintenance of tramways throughout the Province. It was an entirely new departure, so far as Bengal was concerned, and prescribed the procedure to be adopted in obtaining sanction, the manner of construction of tramways, the powers and rights of the promoters in respect of the use of roads, the rules as to fares and traffic, the penalties for offences, and other general conditions. The Jute Warehouse and Fire-brigade Act consolidated the previous enactments on the subject, and extended their application to Calcutta, the Suburbs, and Howrah. It also vested the entire control over the fire-brigade in the Commissioner of Police, and laid down rules as to the levy and apportionment of fees to be devoted to the maintenance of an efficient brigade. By the Act relating to ferries, the control and management of most public ferries hitherto under the authority of Magistrates and Joint-Magistrates were transferred to District Boards and municipalities. The transfer was in accordance with recent legislation granting extended powers to local bodies. By the fourth Act mentioned above the Port Commissioners were empowered to construct docks at Kidderpur and to raise the necessary loans, the interest on which was guaranteed by the Secretary of State for India in Council. The object of the Act further to amend the Village Chaukídárí Act, 1870, was to introduce a better system of appointing panchâyats, and to secure the more certain and punctual payment of chaukídárs. The Act provided for the selection of panchâyats by a magisterial officer on the spot, and fixed three years as the term for which the appointment should be held. It was further provided that they should pay in their collections to the Magistrate, and in case they found themselves unable to realise the chaukídárí assessment, power was given them to appoint a tahsíldár, whose salary would be collected from the defaulting villagers. The discovery that ghí was frequently adulterated with substances which, if not noxious to health, are offensive to the religious susceptibilities of Hindús and Muhammadans, created considerable excitement in Calcutta,

and led to the introduction of the measure to amend the Municipal Act. The Act provided for the imposition of a penalty upon any person selling within the limits of a municipality, to the prejudice of the purchaser, any article of food which is not of the nature, substance, or quality of the article demanded. It received the assent of the Governor-General on the 1st October 1886. The last survey of the town of Calcutta was made in 1847, and since then many changes have occurred with regard to Government holdings in Calcutta. It became necessary, therefore to have them demarcated, and their boundaries defined, under the authority of the Legislature. The value of the survey to the Municipality will also be great. The Act authorising it was passed in January 1887.

The two most important measures, however, which came before the Bengal Legislative Council while Sir Rivers Thompson was Lieutenant-Governor of these Provinces were the Local Self-Government Bill and the Municipal Bill.

The first-named Bill provided for the creation of a machinery for the development of local self-government. According to the Bill as originally drafted and laid before the Council in 1882-83, Union Committees were to be established for the management of village affairs. A group of unions was to constitute the circle of a Local Board, vested with certain executive powers and responsibilities and possessing a certain degree of financial independence. The general control of Local Boards, as well as of all municipalities throughout the Province, was to be placed in the hands of a new authority, denominated the Central Board, consisting of members appointed by Government. The Bill specified minutely the powers that were to be exercised by each of the Local Government bodies so constituted, the duties that were to devolve upon them, the funds to be placed at their disposal, and their relations towards each other and towards the officers of Government. The decision of the Secretary of State negativing the proposed appointment of a Central Board rendered it necessary in the following year to recast many of the provisions of the Bill. As so amended, the Bill provided that the District Board should be an administrative body where there were no Local Boards, and either wholly or partly a controlling body where there were such Boards. Under this scheme there would be a District Board established in every district, but a Local Board, as far as possible on a representative basis, might be constituted in any subdivision or subdivisions, and must be constituted in any subdivision in which the subordinate system of thánd Union Committees had been introduced. Provision was made for the election of members and for the control of the administration. Power was given to the Lieutenant-Governor, and, subject to his direction, to the different Boards, to make rules for the disposal of business. The Bill as preliminarily amended was published for general information on the 2nd April 1884, and circulated to the Commissioners of Divisions for an expression of their opinion. On the receipt of their opinions the Bill was again brought up in the session of 1884-85, and was passed with considerable modifications. As finally passed, Local Boards were empowered to elect as members of the District Board any persons qualified for election to a Local Board. A schedule was added of districts, in every subdivision of which a Local Board should be constituted and two-thirds of the members elected. Provision was made for filling casual vacancies at Board meetings, and for the appointment of Chairmen. It was made clear that District Boards were to manage public primary and middle class schools

other than those for Europeans and Eurasians, and power was given to the Lieutenant-Governor to transfer funds to those Boards for the improvement of private primary schools. It was enacted that District Boards, with the sanction of the Lieutenant-Governor, might guarantee the interest upon capital expended for the purpose of improving means of communication so as to benefit their districts. No change of any importance was made with regard to Union Committees. The rate at which the road-cess might be levied in any district could not be reduced without the sanction of the Lieutenant-Governor. The Commissioners were given the same power of dealing with the estimates as was given in the Municipal Act in regard to municipal estimates. The Act received the assent of the Governor-General in Council on the 11th July 1885.

The Municipal Bill, as laid before the Council in the session of 1882-83, was mainly intended to consolidate and extend the existing law, and did not involve such broad questions of principle as were raised in that relating to local self-government. As passed in the session of 1883-84, the principal changes in the law made by this Act were the abolition of the classification of municipalities, the extension of the elective system to all municipalities except the few that were scheduled, and the grant in nearly all cases to the Municipal Commissioners of advanced municipalities of the right to elect their own Chairman. The approval of Government is now no longer necessary for the election of a Vice-Chairman. While greater freedom was thus granted to municipalities in the appointment of their representatives and in the conduct of their business, special provisions were introduced enabling the Magistrate to exercise effectively a control over the administration.

A Bill to consolidate and amend the law relating to the municipal affairs of the Town and Suburbs of Calcutta has occupied the attention of the Council during two sessions. The Select Committee have recently reported upon it, and its final consideration is postponed till November next.

POLITICAL.

The State of Kuch Behar, which had been under the administration of this Government for a period of about 20 years, was given over to the charge of the Mahárájá Mahendra Náráyan Bhúp Bahádúr on his attaining majority in October 1883. The balance of assets to credit of the State, representing almost entirely the accumulations of surplus funds during the period of minority, amounted to nearly 28 lákhs of rupees, and the total yearly revenue to over thirteen lákhs. The Mahárájá assumed the government of a State provided with good roads and bridges, and complete systems of education, justice, public works, and finance. Under a scheme approved by this Government and the Mahárájá, the administration of the State is conducted by a State Council under the presidency of the Mahárájá upon the same principles as those by which it had previously been guided. The relations of this State with the Government have always been most satisfactory.

Nothing of grave importance has occurred in the Chittagong Hill Tracts during the period under review. Occasional petty raids have been made into our territory, in which the Haulong tribe has been most conspicuous. Order has however, on the whole, been well preserved. In 1884-85, for the purpose of closer supervision and readier control over the semi-military police employed

in them, the Chittagong Hill Tracts were constituted a separate police district under Act V of 1861, and the Commissioner of the Chittagong Division was appointed Inspector-General of Police therein. The results have been excellent. With the acquisition of Upper Burma the position of these aboriginal tribes in the Hill Tracts must be considerably affected. As our power is consolidated in Burma they will find themselves more closely pressed by civilising influences, especially if circumstances should lead to the establishment of direct communication by road between Mandalay and Chittagong, a distance of only some 200 miles.

The Tributary States of Chutiá Nágpur are comparatively unimportant, both in extent and in population. The Sirgújá State, the largest of them, which had been under the direct management of the Commissioner, was made over to the Rájá on his attaining his majority in June 1882. The administration of the new ruler was good on the whole, but a robber tribe, the Korwás, caused great devastation and disorder in his dominions in 1883-84. The Rájá was powerless to restrain them, and they were not quelled till the Commissioner of Chutiá Nágpur with a body of police took charge of the operations against them and restored peace.

The relation of the Tributary States of Orissa towards the Government came before the High Court in the course of the year 1882-83 in connection with the Morbhanj State, when it was decided by three out of five Judges constituting a Full Bench that that State was not within British India. The question was referred to the Government of India, with the Lieutenant-Governor's recommendation that there should be an appeal from a decision the correctness of which was open to grave doubts. The judgment, however, has been accepted, but only in its effect upon the one State to which it applied. Since the death of the Mahárájá in 1883 the State of Morbhanj has been under British management with the prospect of extensive material development. The minor Mahárájá, now 13 years of age, has been under the charge of an English tutor, and is receiving his education at Cuttack.

In the same year there was an outbreak in the neighbouring State of Káláhándí, in the Central Provinces. A very serious rising of the Khonds was fomented by interested persons in the early part of the year, and many lives were lost. Judicious local arrangements, however, and the despatch of a strong body of police, prevented the disturbances from spreading across the frontier into these Provinces. In the following year there was a disturbance in the State of Nílgiri. There a party discontented with the action of the Díwán, whose services had been lent to the Rájá, committed many acts of violence. An enquiry was held, the Díwán finally removed, and, at the repeated request of the Rájá, the services of an European officer were lent to the State. The only other event of importance in connection with these States was the introduction of arrangements (in the year 1885-86), as an experimental measure, for the trial of offences committed within the Tributary Mahálś, within the limits of the Mahálś themselves; and in the same year a proposal for the execution of civil decrees passed in the States against British subjects resident outside of the States came under, and still remains under, the consideration of Government. A scheme for the better equipment and organisation of the police of the Tributary States of Orissa has been also matured, and efforts are being made to improve them as a police force.

A civil suit brought by Kumár Nabadwíp Chandra Deb against the Mahárájá of Hill Tipperah for determination of his rank and also for maintenance was dismissed by the High Court in 1882-83 on the ground of want of jurisdiction, it being held that the Mahárájá was an independent Prince or ruling chief, to whom section 433 of the Code of Civil Procedure applied. This ruling was of great importance, as the Mahárájá owns extensive estates in British India, and if he be held to be an independent Prince, difficulties may be expected to arise in connection with them. A modification of sections 432 and 433 of the Code has since been under contemplation.

The Deb Rájá Lamchen of Bhútán abdicated in May 1883 on account of ill-health. He died shortly afterwards of dropsy, and Gaujangam, his nephew, succeeded him. In 1885-86 it was considered advisable to delay, till the cessation of internal dissensions in this State, the payment to the Bhútán Government of the annual allowance made under existing treaties. With the restoration of order the payment of the subsidy has been revived.

The relations of the Government with the independent State of Sikkim have been friendly—though there have been some difficulties of administration in Sikkim from the practice which the Mahárája has adopted of residing for the greater part of the year beyond his own territories in Tibet.

CENSUS AND ETHNOLOGICAL SURVEY.

The report on the Bengal Census of 1881 was submitted in the course of the year 1882-83. Since the census of 1871 was taken the province of Assam, which at that time formed a part of Bengal, had been formed into a separate administration; and several other minor changes of jurisdiction had also occurred. Making allowance for these, it appeared from the returns that the population of the provinces subject to the Lieutenant-Governor of Bengal has increased during the preceding nine years from 62,705,718 to 69,536,861. The increase therefore amounted to 6,881,143, or 10·89 per cent. The total population in 1881 was composed of 34,625,591 males and 34,911,270 females, the excess of the latter being 285,679; and nothing is more remarkable than the growth of this excess, which in 1872 was only 22,986. The apparent rate of increase varied enormously in different parts of the Province, and it is clear that a portion of it was due to more accurate enumeration and to the inclusion of tracts of country which seem to have escaped notice in 1872. The average density of the population of the entire Province was 371·41 persons to the square mile; and this also varied very much in different districts. In Howrah the average density of the village population, exclusive of the numerous municipalities of that district, reached the high figure of 1,130; but this was exceeded in the Múnshíganj subdivision in Dacca, where the density was 1,278 persons to the square mile. The total urban population of the Province was only 36,64,229, and there were only 96 towns with a population exceeding 10,000 souls, while on the other hand there were as many as 264,523 villages each containing less than 5,000 inhabitants. These figures illustrate the remarkable paucity of large towns in Bengal.

In the tables that dealt with religious belief the population of the Province was divided into Hindus, Síkhs, Muhammadans, Christians, Buddhists, Brahmos, Jains, Jews, Parsís, and "All Others." There were 45,452,806 Hindus, 21,704,724 Muhammadans, and 128,135 Christians. Those persons who did not

fall under any of the nine principal religions and were shown under the head of "All Others," were classified in a subsidiary table and divided into Santáls (883,938), Kols (613,863), Other Western Aborigines (469,622), Eastern Aborigines (88,399), and "Others" and "Unspecified" (35,404). Since 1872 the Hindus have increased at the rate of 13·64 per cent., the Muhammadans by 10·96 per cent., Christians by 40·71 per cent., and Buddhists by 93·29 per cent. In the case of the last-named sect, however, the increase, which was almost wholly confined to the districts of Chittagong, the Chittagong Hill Tracts, and Dárjíling, is for the most part due to more accurate enumeration. The increase among Christians is noticeable, attributable partly to immigration from Europe and partly to conversions from heathenism, especially in the districts of Chutiá Nágpur.

The tables which shewed the conjugal condition of the people are of special interest, and much light will be thrown upon important sociological questions by the facts which they disclose. The percentages of the single, the married, and the widowed, to the total population of each sex were among males 46·71, 49·30, and 3·98, respectively, and among females 29·71, 49·00, and 21·27, respectively. These figures are in marked contrast with the corresponding percentages in European countries. Many interesting facts are also to be learnt from the Census tables regarding the ages at which marriage is usually contracted in this country. Out of every 100 boys below the age of ten years rather less than four were married; while the number of married girls of the same age was 11. From 10 to 20 years of age, 71 boys in 100 were still bachelors; while out of 100 girls of the same age 76 were married and 4 were widows, only 19 being still unmarried. Practically it may be said that almost the whole female population passes from the single to the married state before their 20th year.

There were 65 castes or tribes in Bengal which claimed more than 100,000 members each. The most important, numerically speaking, were the Goálás, including Ahírs, Gops, and Gaurs, with 3,992,949 members; the Bráhmans, with 2,754,100; and the Kaibarthas, with 2,100,379. Ten other castes, the Koches, Chandáls, Káyasths, Rájputs, Chámárs, Telís, Kurmís, Koírís, Dosádhs, and Bábhans, each claimed more than one million members. The statistics relating to the occupations of the people were said to be of comparatively little value, owing partly to the inaccuracy of the entries made by the enumerators in the original census schedules, and partly owing to the inconvenient and unsuitable system of classification. The population was broadly divided into six main classes,—Professional, Domestic, Commercial, Agricultural, Industrial, and Indefinite and Non-productive, but the details were not trustworthy. Information was also given concerning the degree of education, the age, birth-place, mother-tongue, and physical and mental infirmities of the population. The Census Report was a work of great interest, and has proved of much practical value in the administration of the country.

In September 1882 the Government of India, at the instance of the Census Commissioner, issued a circular to all local Governments and Administrations, suggesting that steps should be taken, on the basis of the statistics recorded in the census of 1881, towards collecting fuller and more precise information than is at present in existence regarding the castes and occupations of the people of India. Sir Rivers Thompson, fully recognising that

the Provinces under his charge, with a population made up of many diverse elements, offered a singularly promising field for the proposed enquiry, gave effect to the wishes of the Government of India in 1885 by appointing Mr. H. H. Risley to this special duty.

In according his sanction to the detailed plan of operations, which was drawn up by the special officer, the Lieutenant-Governor expressed his opinion that, apart from the scientific aspects of the question, substantial administrative benefits might be looked for from the collection of systematic information regarding the actual usages and beliefs of the mass of the population. An ethnographic survey of the people was, he held, as desirable in its way as a cadastral survey of the land; provided only that it could be carried out within a reasonable time and without excessive expenditure. In effecting a census of the population, in organising famine relief, in the administration of civil and criminal justice, and even in working out schemes of direct taxation, the customs of the main groups into which the people are divided have to be carefully taken into account, and every advance of knowledge in such matters tends towards the general improvement of our administrative system. Social reforms, moreover, have begun to be freely discussed by the leaders of Native society, and the Government has been invited to exercise its influence to facilitate the remarriage of Hindu widows and to discourage the prevalent practice of infant-marriage. In questions of this kind the want of any systematic record of the facts cannot but enhance the difficulty of determining whether any, and if so what, action can properly be taken by Government.

Apart from the practical uses of the enquiry, the scientific side of the subject opened out a large field for investigation. From the first, therefore, the attempt has been to follow the methods of investigation sanctioned by the best European ethnologists, and to adapt these to the special conditions, administrative and social, under which official researches have to be conducted in India. At an early stage of the enquiry it became evident that the wholesale adoption of high-caste custom by members of the lower castes had greatly obscured the origin of these latter groups, and that conclusions based solely upon observation and comparison of customs were likely to prove in great measure misleading. In order to eliminate this source of error, and at the same time to collect data for a more searching analysis of the race-stocks which make up the population of Bengal, the Lieutenant-Governor sanctioned in March 1886 a proposal to supplement the enquiry into custom, which formed the basis of the original scheme, by an examination in the methods approved by European anthropologists of the physical characteristics of selected castes and tribes. This extension of the original plan has been working in Bengal for some months past, and with the approval of the Government of India and the co-operation of the local Governments concerned it has been introduced into the North-Western Provinces, the Punjab, and the Central Provinces. Special interest attaches to the experiment as being the first attempt on a large scale to apply the anthropometric system elaborated by the French school of anthropologists to the elucidation of the ethnological problems so prominent in India. The operations are still incomplete, but the statistics hitherto collected afford grounds for believing that the final results will throw considerable light upon the ethnology of Bengal.

The papers relating to both branches of the scheme have, with Sir Rivers Thompson's permission, been circulated to the leading ethnologists in Europe,

and it appears from the replies received that the proceedings have the approval of the highest authorities on the subject. The Lieutenant-Governor desires to take this opportunity of thanking these gentlemen for the trouble they have taken in the matter, and for the readiness with which their advice has been given.

In publishing the results it is proposed to maintain, so far as may be possible, the distinction between the administrative and the scientific branches of the subject. For administrative use it is intended to embody in an ethnographic glossary a detailed description of all tribes, castes, sub-castes, sections, occupations, and religious sects now traceable in Bengal, either from the statistics of the census of 1881 or from other sources. This work has already been commenced, and is likely to be completed by the close of the next official year. It will therefore be available for use in the next census of Bengal, and it may be expected to materially simplify and cheapen the compilation of the census statistics.

The scientific aspects of the subject will be dealt with in a second volume. The materials for this portion of the work consist of deductions from the descriptive record of customs contained in the ethnographic volume, together with the statistics of physical characters now being collected. By piecing together the evidence comprised under these two heads, it is hoped that it may be possible to analyse and classify the chief component elements of the population of Bengal, and to offer some explanation of the manner in which that population has been developed. Should this task be successfully accomplished, the Government of Bengal will have done all that can be fairly demanded of it to further the interests of science and to lay a sound foundation for future workers on the ethnology of India.

METEOROLOGY.

An improved system of storm signals, by which warning is given, not only of the approach of severe cyclones attended by storm-waves, but also of the existence of smaller cyclonic storms of limited extent and intensity, was brought into operation in 1882-83, and has proved of considerable value. In the same year the observations taken on board vessels navigating the Indian seas, which were collected by the Board of Trade, were examined and collected, and charts were prepared from them embodying the information they afforded as to pressure, winds, currents, &c., in the Bay of Bengal and the Arabian Sea. As affecting the interior of the Province, a most useful arrangement was introduced in 1883, under which the Meteorological Reporter to Government receives daily from some 40 places in telegraphic communication with Calcutta, and publishes for general information, returns of the state of the weather and rainfall which may have occurred in the preceding 24 hours. This arrangement is in force from the 1st May to the end of October in each year—a period which covers the rainy season and the principal agricultural operations of the country, and thus enables the Government to watch minutely the prospects of each crop throughout every district.

ECONOMIC HISTORY OF THE PEOPLE.

In 1882 the rainfall of the year was generally below the average, and was, moreover, unequally distributed, both as to season and as to place. The result

was a decrease in the outturn of the winter or principal harvest, and in some places a decline in the spring and autumn crops also. The large stocks of food-grains that had accumulated during the abundant seasons of 1879-80 and 1880-81 had been somewhat reduced in 1881-82, and were largely broken in upon during the following year. A general rise, of moderate amount, in the prices of rice, wheat, and pulses took place all over the province. Notwithstanding this, however, the deficiency was relative rather than absolute, and was nowhere so accentuated as to interfere with consumption. The comparative failure of the crops, which was not counterbalanced by the stocks of previous years being brought into the market, caused a rise in the value of field produce, which fully recouped the agricultural labouring classes for the diminished outturn, while the extensive public works that were then in progress in many parts of the Province intensified the demand for labour, and enabled the poorer classes to exact higher rates of remuneration. The generally deficient and unevenly-distributed rainfall of 1883 was not favourable to the harvests; and although the cultivators, owing to improvements in communications and in means of transport, were, where the harvests were good, gainers by the rise in prices which deficient harvests produced, persons with fixed incomes and day-labourers inevitably suffered. In the greater part of Bengal Proper the rainfall was below the average, and the harvests, especially the winter crop of rice, were in consequence somewhat deficient. The stocks still remaining from the accumulations of previous years, however, were sufficient to prevent so great a rise of prices as would otherwise have taken place; and although the people were pinched in certain tracts, there was no general distress even there. The Orissa Division suffered but slightly from the unequal distribution of the rainfall. Throughout the Patná and Bhagalpur and Chutiá Nágpur Divisions, however, the winter and spring crops were scanty, and were only saved by heavy dews, and by the employment, where possible, of artificial irrigation. The partial failure of the crops in these Divisions necessitated some limited operations for the relief of the people in certain localities where crop failure had been most pronounced; and these operations were fully successful.

The rainfall of 1884 was again deficient and unequally distributed. By the cold weather of 1884-85 there was more or less cause for anxiety on account of existing or apprehended scarcity of food owing to crop failure in various localities of the western portion of the Lower Provinces. By degrees, however, the area calling for special care or attention from Government narrowed down; and in May 1885, so far as the effects of the monsoon of 1884 were concerned, only in the Patná and Bardwán Divisions did any reason for anxiety continue to exist. The anxiety in regard to the affected tracts in the Patná Division was always of a mitigated character, and more in the nature of apprehensions for the future than of concern regarding existing distress. But over about 1,000 square miles in the Bánkurá, Bardwán, and Bírbhúm districts, in which there had been crop failure more or less pronounced for two successive years, serious distress, necessitating the establishment of systematic relief operations, became apparent in the spring. Even in these last districts, however, the supply of food was always plentiful in the markets, and at prices which can hardly be said to have touched famine rates. The classes who stood in need of relief were the beggars and others who in ordinary times subsist on the charity of their neighbours, and the day-labourers;

and the difficulty lay in the fact that the failure in the local crops restricted the labour market and forced on Government the necessity of providing employment for those whose circumstances prevented them from emigrating in search of work. In the administration of all measures of relief the provisions of the Provisional Famine Code were rigorously adhered to, and it is gratifying to be able to record that the success of the relief operations in this Division in the prevention of mortality from want of food was complete. From 1st April to December 1885 the total cost of relief to Government was Rs. 1,96,000. Outside of these tracts the crops of 1885 were (with the exception of jute) above the average, while the prices of labour were either stationary or showed a tendency to rise. Speaking generally, although the prices of food in the affected districts were higher than usual, there was no want of it in the markets: and this fact demonstrates the ease with which trade by means of roads and railways can now meet demand in places where but a few years ago it was necessary for Government to import food at enormous expenditure and labour in order to save human life.

The excessive rainfall of August and September 1885 caused extensive floods in South-West and Central Bengal and in parts of the Bhágalpur Division. The Ganges, and the great rivers into which it divides as it passes through Central Bengal, rose to unusual heights, and spilled in destructive floods over the surrounding country. The districts which suffered most, and mainly from the breach caused in the Lálthikuri embankment, were Murshidábád and Nadiyá. In the former no less than 1,250 square miles, or more than one-half of the total district area, were under water. In the latter district nearly 2,200 square miles were inundated. Though much temporary hardship and discomfort were caused by these floods, they did little permanent harm, while the after effects ensured to the cultivators for the next few years crops far more abundant than those they lost. For the relief of immediate distress relief circles were formed in the affected areas, and a Central Committee was formed in Calcutta to collect subscriptions and organise relief for those forms of distress with which Government agency could not adequately cope. The Committee received Rs. 65,665 in subscriptions, and expended Rs. 37,000 in the relief of distress. The balance has been invested so as to form the nucleus of a distress fund to be applied promptly on the occurrence of future calamities by famine or inundation in these Provinces.

A great disaster overtook the province of Orissa in the storm-wave which submerged a portion of the coast of the Cuttack district at the mouth of the Mahánadí river on the 22nd September 1885. At 6-20 a.m. on that date a sea-wave 15 feet in height broke over False Point. Two hundred and fifty square miles were submerged by it in its course; 11 villages were completely swept away, every man, woman, and child in them being drowned at the same time; 150 more villages were entirely levelled, and their crops completely destroyed, but a considerable portion of their population escaped. It is estimated that altogether about 5,000 persons were drowned by the storm-wave. Immediately after the disaster the Government officials visited the devastated country and distributed food to the survivors. At the beginning of the relief operations, as many as 8,000 persons daily were in receipt of charity. The villages which were not utterly destroyed recovered from the effects of the storm with remarkable rapidity, and within a short time few vestiges of its destructive character remained. In the Balasor district much

less damage was done by the storm-wave. It was stopped by the embankment of the sea-coast canal, which thus saved hundreds of square miles of country from being submerged by salt water. As a protection against a similar visitation a strong place of refuge is under construction on the highest ground available at False Point, and this should be ready for occupation in June 1887.

The year 1886 was from an agricultural point of view a very prosperous one. The rainfall was abundant, and on the whole very favourable to the crops, though in some parts of the Province floods were caused by excessive rain in September and October. The autumn crops were generally fair, but in Behar and Eastern Bengal the outturn was below the average owing to loss from floods. The outturn of the winter crops of 1886-87 is believed to have been exceptionally good. The spring crops of 1887 were, at the time of writing, in a very favourable condition, promising a good outturn.

The general condition of the mass of the people in Eastern Bengal is not only absolutely good, but rapidly improving. The only part of the Lower Provinces where the standard of living is unduly low is Behar, where the density of the population, the improvident habits of the people, and in many places a crushing system of land tenure, have combined with conditions of soil and climate to intensify the struggle for existence. One of these obstacles to improvement has been partially removed by the operation of the Tenancy Act; and it is hoped that not the least of the benefits which will be derived from this measure will be the increase of habits of providence, and a higher, but yet attainable, standard of comfort amongst a people who have hitherto been too literally living from hand to mouth. Even in Behar, however, improvements have been rapidly making way since 1882, and year by year the people have had more money to spend on marriage ceremonies, good clothes and ornaments, and luxuries generally. Throughout the Province the only class whose condition does not appear to be improving is that composed of the educated and semi-educated scions of the higher castes. These men, who are turned out in ever-increasing numbers by the English schools and colleges, find that they have no longer a monopoly of the Government service, and they have not yet learned to apply themselves to other pursuits. With this exception, the condition of the people at large has continued to exhibit healthy signs of improvement.

EMIGRATION.

The State-recognised emigration from the Lower Provinces of Bengal falls under two categories—Inland and Colonial, each of which is regulated by a separate law. By Inland emigration is meant emigration to the labour districts of the Assam Valley, Sylhet, Cachar, and Chittagong, where there is a demand for coolies in connexion with the tea industry. By Colonial emigration is meant emigration beyond the sea to British or to Foreign Colonies. In the Lower Provinces of Bengal the great recruiting ground for both these classes of emigration is South Behar and the districts of Hazáríbágh, Bírbhúm, Bánkurá, and the Santál Parganás. Coolies, it is true, are sometimes recruited elsewhere; but even in these cases it is almost always found that they are wanderers

who have left their homes in these localities in search of work. The Bengáli, or the Oriyá, is too timid and, it may be added, too comfortable and well-fed, to leave his home in pursuit of work in a distant land. It is only the hardy inhabitant of crowded Behar, or of wild and uncultivated Chutiá Nágpur, who, under pressure of an ever-increasing population, ventures to seek a living in a far country. While, however, the inhabitants of South Behar emigrate in the greatest numbers to the Colonies, those of the other localities mentioned above confine themselves almost entirely to inland emigration.

A new Inland Emigration Law (Act I of 1882) came into force from the 6th of January 1882, and was thus in operation during the entire period under review. Its leading principles may be thus briefly described. While retaining safeguards against irregular recruitment and the improper treatment of emigrants on their journey to the employer's estate and during the term of their engagement, it sought to facilitate emigration to the tea districts by providing for an increase in the number of registering officers in the recruiting districts; by permitting garden-sardárs to recruit any number of persons, whereas they were formerly restricted to 20; by severing all connection between them and contractors; and by authorising the employment of local agents to supervise the operations of garden-sardárs, or, under special license, to recruit emigrants themselves and despatch them to the labour districts without the assistance of sardárs. The term for which contracts may be made was also extended from three to five years, and no restriction whatever was imposed on free emigration. The labourer may now proceed to the tea districts either as a free emigrant, taking work on an ordinary contract or entering into a contract under the Act after his arrival, or as an emigrant recruited and registered under the Act. In the first case he is in no way subject to the Act; in the second he is subject only to such of its provisions as refer to the carrying out of the labour contract; and in the third he is completely under the Act from the date of his recruitment until the expiration of his engagement. As far as the Government of Bengal is concerned, which chiefly has to deal with questions connected with the recruitment and passage of the emigrant to the labour districts, the recent extension of the railway system, the improvement in the means of communication, and the consequent shortening of the journey, have much diminished the need of any emigration law. In the labour districts where the emigrant comes under contract the case may be different in the interests both of the employer and the employed; but for Bengal the continuance of any special law at all will probably be found unnecessary after the lapse of a few years. An important step in the promotion of rapid communication with the Assam Valley was taken in 1882-83 by the establishment of a subsidised daily steam service between Dhúbrí and Dibrugarh, the firms who took the contract having engaged to accomplish the voyage between these places regularly in four days. To this service the Bengal Government contributes thirty-five thousand rupees a year. In January 1886 a similar service was started by the same firm between Náráyanganj and Sylhet and Cachar, with prospects of great advantage to the health and comfort and convenience of future emigrants. Here, too, the Government of Bengal has promised an annual subsidy of Rs. 10,000 for two years, when the enterprise is expected to be self-supporting.

It had for some years past been considered desirable to discourage as far as possible recruitment through the agency of contractors, and to promote in

its place the general employment of garden-sardárs; and the provisions of the new law, permitting the appointment of local agents, were introduced especially to further this object. It will be seen from the following figures that the object of the law has been attained:—

Year.	Contractors' coolies	Sardárs' coolies.	Totals	Percentage of sardárs' to contractors' coolies.
1881	6,415	2,379	8,794	37·0
1882	7,996	2,907	10,902	36·3
1883	9,875	5,291	15,167	53·5
1884	7,081	10,235	17,316	144·5
1885	4,398	5,709	10,107	129·8

The great feature, however, of the period under review has been the development of free emigration. This third system works outside the Emigration Act, and under it recruiters without any license collect labourers in the recruiting districts and take them to Assam on their own responsibility, unaided by Government. This is now the principal method of recruitment, and accounts for the large reduction in the year 1885 in the number of coolies who emigrated under the special protection of the Act. Another result has followed from the growth of this free emigration, which of its very nature is incapable of registration—that the statistical returns of coolies registered under the Act are no longer trustworthy as giving indications of the amount of emigration from the Lower Provinces of Bengal to Assam. For instance, though the figures for 1885, given above, show a large decrease in the total number of registered emigrants, it cannot hence be concluded that the total volume of the stream of emigration in that year was diminished: very possibly the reverse was the case. The business of recruiting labour for gardens of the Assam Valley districts has been lately in great part transferred to agents having their head-quarters at Dhúbrí (in Assam), who import free emigrants thither and then cause them to execute local contracts. In the absence of trustworthy statistics regarding free emigration to Cachar and Sylhet, it becomes necessary, in drawing conclusions on this subject, to rely on those obtainable in respect of emigration into Dhúbrí. From the following table, which gives the number of free emigrants only so far as it is known from this source of information, the great progress made by free emigration will be apparent. In 1884, it is true, sardárí recruitment somewhat exceeded free recruitment; but this was due to the fact that in 1883, in consequence of a rise in the price of tea, employers were encouraged to increase their labour force for the following year, especially through the more trustworthy agency of their sardárs, who doubtless were assisted by the prevailing dearness of food in some of the recruiting districts. In 1884, on the other hand, a fall in the price of tea discouraged a resort to the sardárí system, and free emigration was therefore relatively more active in 1885, though there was a falling off in emigration in respect of all classes. In 1886 free emigration was both actually and relatively more active than in any previous year, emigration under the other two systems having fallen to the lowest numbers recorded for the five years under notice. Eventually, there can be little doubt, the entire supply of labour to the Province of Assam will be by free emigration.

Statement showing, in respect of emigrants forwarded to Assam viâ Dhúbrí and Goálándo, the number and percentage of emigrants who proceeded under the Free, Sardári, and Contractors' systems during the four years ending 31st December 1885.

System of Emigration.		Years.									
		1882.		1883.		1884.		1885.		1886.	
		Number.	Percentage.	Number.	Percentage.	Number.	Percentage.	Number.	Percentage.	Number.	Percentage.
Non-Act	Free ...	5,344	32·38	10,696	48·69	12,199	42·16	9,320	51·64	13,134	69·42
Act	Sardári ...	1,494	9·03	7,317	35·22	14,268	49·31	6,433	35·64	4,937	26·92
	Contractors' ...	9,690	58·62	3,360	16·17	2,463	8·51	2,293	12·70	847	4·47

Up to the year 1881 numerous suggestions for the amendment of the Indian (Colonial) Emigration Act, 1871, had from time to time been received by the Government of India. Many of these which it appeared desirable to adopt dealt with minor and, comparatively speaking, unimportant points; but some substantial changes were proposed which would materially alter the working of the then existing law. It was moreover found that the form and arrangement of the Act were susceptible of improvement. Under these circumstances it was thought advisable to repeal the Act and re-enact it with all the requisite amendments. Accordingly the Indian Emigration Bill, 1881, was drafted and published. It was referred to this Government for consideration, and in the year 1883 an officer was deputed to conduct in Bengal an inquiry into the general system of Colonial emigration, and especially of recruitment, similar to one which had been already carried out in the North-Western Provinces and Oudh. The inquiry proved of considerable use, and an amended Bill was published in the same year, giving effect to all the recommendations which appeared likely to facilitate recruitment. It included measures to improve the mode of registering emigrants so as to facilitate correspondence between India and the Colonies, and to secure the regular transmission to their heirs in India of the estates of emigrants dying intestate abroad; and, generally, attention was directed to promoting the free working of Colonial emigration in Bengal.

The amended Bill became law on the 18th December 1883, but, except in the power to make rules, was not to come into force "until such day as the Governor-General in Council shall appoint by notification in the *Gazette of India* (section 3);" it being intended to frame, publish, and finally sanction the rules for giving effect to the provisions of the Act before it was actually brought into operation. In connection with the new rules then in course of preparation, the Government of India called for a report as to the particulars that should be prescribed, both for the register of emigrants and for the reverse of the agreement provided for under sections 31, 35, and 36 of the Act. Revised forms were accordingly drawn up and submitted in November 1883, with a report furnishing the information desired by the Government of India on the subject. These draft rules remained under consideration of the Government of India during the next two years, and after consultation with the various Colonial Governments, finally came (with the new Act) into force on the 1st April 1886.

The changes carried out in the new law were most of them of too technical a nature to be mentioned here: it will suffice to mention the principal objects aimed at by it and by the rules. They endeavoured to secure the comfort of the emigrants between the date of their recruitment and that of their arrival in their new home by a series of regulations regarding their housing, food, and general treatment. They provided a somewhat elaborate system of registration to ensure that the emigrant was going of his own free will to a foreign country, and that once he had emigrated he could be easily traced by his friends at home. They regulated the system of recruitment, making unlawful recruiting punishable with a heavy fine. A recruiter was allowed to recruit practically anywhere within the Province on the counter-signature of the Magistrate of the district within the limits of which he wished to work, thus relieving him of the necessity of obtaining a separate license for each district, as he was obliged to do under the old law. As the Act only came into full force at the commencement of the year 1886-87, it is impossible to say yet decisively whether it has succeeded in attaining all its objects; but the measure of its success can be gauged from the result of the executive action taken in the spirit of the new law, and in anticipation of its passing.

The new Act was essentially a liberal one, and, under proper restrictions, gave much greater encouragement to emigration than formerly. The inquiry already alluded to brought to the notice of Government that over a great portion of the best recruiting ground emigration was looked upon by officials of all grades as a thing to be discouraged. The inquiry was therefore utilised for pointing out that the advantage of emigration as a means of relieving the pressure for existence in crowded Indian districts needs no demonstration; and that it is also unquestionable that the surplus population is sufficiently large to meet the labour demand of the Colonies as well as that of the less populated provinces of India itself. The real and only serious obstacle to recruitment for the Colonies has been, and must continue to be, the objection of the people themselves to emigrate, due to caste prejudices, general ignorance of the conditions of life and prospects in the Colonies, and unwillingness to leave their homes in seasons of prosperity and cheap food. The ignorance and prejudices of the people may to a large extent be removed, and towards this the Agencies themselves can contribute by the employment of return emigrants in recruitment, by helping to promote regular correspondence between the Colonies and this country, and by providing that the intestate estates of deceased emigrants shall be regularly conveyed to their heirs in India. The effect of prosperous seasons on emigration is, however, due to economic laws, which cannot be controlled by any legitimate executive or legislative action: no improvement of the law or rules will stimulate emigration when the Indian labourer earns good wages at home and can readily provide himself with food and clothing. This expression of Sir Rivers Thompson's opinion was followed up by the loyal co operation of the officials in the recruiting districts with the most striking results.

It may be noticed that the total Colonial emigration from British India has greatly diminished of late years. This is not due so much to lessened popularity of emigration as to lessened demand in the importing Colonies, in some of which the prosperity of the sugar manufacture, on which the coolies are employed, has declined. In this way, while in 1882-83 the total number of emigrants recruited was 13,035, in the last nine months of 1885 it was only 7,567. But allowing for this total diminution in the number of indents for

coolies, it will be seen that in the Lower Provinces there has been a steady increase in the popularity of emigration. In 1882-83, out of the 13,035 emigrants recruited, 6,577, or more than half, came from the North-Western Provinces, 2,656 from Oude, and only 2,170 from Bengal and Behar. In the last nine months of 1885 these proportions were reversed. Out of 7,567 recruited, 3,957 came from Bengal and Behar, only 2,326 from the North-Western Provinces, and 1,069 from Oude. It thus appears that Colonial emigration from Bengal, in spite of the decreased demand for labour from the Colonies, has not only *absolutely* increased to a considerable extent, but has increased enormously, when considered in relation to the emigration from the other coolie-providing Provinces of Northern India. Again, the same result appears if we take the districts of recruitment separately. For instance, in Gayá there were 146 coolies recruited in 1879-80, 109 in 1880-81, and 27 in 1881-82; but in the last nine months of 1885 the number was 612.

So far as experience of the working of the new Act and its connected rules has gone, it has been satisfactory. The only complaint received has been concerning an increase of clerical labour involved in the new system of registration; and this, if found to be an obstacle to the fair working of the Department, can easily be remedied by a slight alteration in the rules. As a general opinion on the working of these rules, it may be stated that though more voluminous than those which preceded them under the former Act, they as a whole successfully embody simply what past experience has shown to be actually required for the proper conduct of emigration work.

AGRICULTURE AND HORTICULTURE.

The improvements which had for some years been in progress in the Botanical Gardens at Sibpur, near Howrah, were completed in 1882-83. The entire grounds were raised in level, sheets of ornamental water were laid out, driving roads were cut through all parts of the gardens, and a number of fine buildings of the most approved design erected. The gardens are now a handsome and valuable addition to the metropolis, and their usefulness, both for the advancement of horticultural science and for the furtherance of popular education, has been greatly enhanced. They have also been the scene of many important horticultural experiments, especially those connected with fibrous plants.

Experiments were tried in 1882-83 and the following year in the rearing of silk-worms in the Rájsháhí Central Jail, but they did not meet with much success. An exhibition of silk cocoons was held at Berhampur in January 1884, and another at Rámpur Beauleah in January 1886. These have succeeded in fostering a spirit of emulation among the cocoon-rearers by bringing together in competition the collections of the various silk-producing tracts.

Organization of the Bengal Agricultural Department.—It will be convenient to summarise in this place the history of the appointment of the Director of the Agricultural Department, Bengal.

Passing over the early history of Agricultural Departments under Lord Mayo's administration in 1870, it will be remembered that the idea of the direct intervention of Government in agricultural progress and reform in India was revived in 1881, in consequence of the report of the Famine Commission.

Struck with the absence of proper means of collecting trustworthy information in times of prosperity, on which the action which adverse times require might be based, the Famine Commission made certain recommendations for the organisation of an agency for its collection. Looking at the condition of the country from two points of view, namely, the prevention and the relief of famine, the Commission recommended, in the first place, that better methods of cultivation should be introduced, and that agricultural knowledge should be more widely diffused; and in the second place, they recommended that measures should be adopted for the collection and record of those results of past experience and current events which would enable the Government to deal systematically, effectively, and economically with famine when it might arise.

These recommendations were considered by the Government of India, and though some points of detail were not approved, the leading principles were adopted and submitted for the sanction of Her Majesty's Government. This sanction was accorded in 1881, the Secretary of State, at the same time, defining the objects of the new Revenue and Agricultural Department to be—

1. The collection and embodiment in convenient forms of the statistics of vital, agricultural, and economic facts, in order that Government and its officers might always be in possession of an adequate knowledge of the actual condition of the country, its population, and its resources.

2 The general improvement of Indian agriculture with the view of increasing the food-supply and general resources of the people

3 Better and prompter organisation of famine relief, whenever the actual approach of famine might be indicated by statistical information

While the objects of the new Department were thus declared, the attention of the Government of India was invited to the necessity of establishing under local Administrations a suitable machinery for the collection and record of statistical information, and for the improvement of agriculture throughout the country. It was the want of such machinery which marred the usefulness of Lord Mayo's plans; and to avoid a repetition of such a failure, the Government of India recommended that provincial agencies should be created to give effect to what was its settled policy in the matter of agricultural and industrial improvement and the prevention and relief of famine

These views of the Government of India were communicated to Sir Ashley Eden, who was disposed to trust to the impending legislation on the rent question for a solution of the difficulties with which those Provinces have to contend in the absence of any agency for statistical research.

It seemed, however, to Sir Rivers Thompson, on his assuming charge of the office of Lieutenant-Governor, that, apart from the question of statistical information, the creation of an Agricultural Department was calculated to confer many benefits on a people 75 per cent. of whom were agriculturists, and many administrative advantages to Government; and he accordingly submitted to the Government of India proposals for giving effect to his views on the subject as well as to those which had been repeatedly expressed by the Government of India and the Secretary of State. He showed that nothing substantial had hitherto been achieved towards collecting trustworthy agricultural statistics and obtaining correct records of rents or tenures such as are found in other parts of India. Owing to the want of village records and of

a village agency, this defect could not, as far as permanently-settled estates were concerned, be remedied without special legislation. The case was, however, different in estates the property of Government and of disqualified proprietors. Government could make surveys and settlements of rents in them, and establish village records under the powers afforded by the existing law. The Government of India, in expressing to the Secretary of State their general approval of the views of this Government, and in advocating the creation of a special Department, laid particular stress on what it understood would, pending the adoption of more extensive operations, be the first duty of the new Department, namely, the organisation of the patwárí staff and the preparation of a scheme for the collection of agricultural statistics in estates under the management of Government and of the Court of Wards. The Secretary of State, while doubting the feasibility of the objects at which the local Governments and Government of India ultimately aimed, was disposed to admit the importance of providing the Lieutenant-Governor with the requisite agency for advising the Government generally in all matters relating to agriculture and statistics, as well as for undertaking the preliminary inquiries necessary in connection with the experimental survey of the Patná Division, which had been sanctioned by his predecessor. He accordingly sanctioned, as a temporary measure, for two years, the employment of an officer for the purpose above explained, and also for collecting information necessary for enabling the Government of Bengal to submit in a complete shape a detailed report on certain points connected with the management of wards' and Government estates, on which he desired further information.

For the performance of these duties, Mr. M. Finucane, on his return from furlough at the end of December 1884, was selected to be the Director of the Agricultural Department, and was at first employed mainly on pressing work in connection with the Bill, which subsequently was passed as the Bengal Tenancy Act. On the 2nd May 1885 a Resolution was issued, defining broadly the functions of the newly-created office to be of two kinds—agricultural research, including the arrangements for the experimental survey in Muzaffarpur district, and for the maintenance of the results obtained by a system of village records, as also the collection of the returns of the prices of food-staples required by the Bengal Tenancy Act; and agricultural improvements, to be undertaken with the co-operation of such societies as the Agri-Horticultural and the Zoological, of local Committees, and of such landowners or farmers as might be good enough to lend their assistance. In regard to duties of the first class, the Director was placed under the control of the Board of Revenue and instructed to report to them; while his efforts for agricultural improvement were to be made under the direct orders of Government in the Revenue Department. The services of two members of the Civil Service and of a Deputy Collector, all of whom were graduates of the Cirencester College, were placed at his disposal, so far as this could be done without interfering with their other duties.

Notice of the Muzaffarpur cadastral survey work, which has been supervised by the Director of the Agricultural Department, so far as regards the framing of the record of rights and the settlement of fair rents, will be found in the section of this note dealing with survey.

A great number of agricultural experiments were made under the skilled supervision of the Cirencester graduates and with the co-operation of zamíndárs

and cultivators. A programme of experiments to be tried during the present year has been arranged with the Agricultural and Horticultural Society. In Bengal more perhaps than in other parts of India there exists a large class of educated men connected with agriculture by their daily pursuits, and ready, when properly approached, to work with official experts for the purpose of ascertaining facts, testing supposed improvements, and diffusing useful information. In this respect Bengal is probably the most promising field yet opened to the Agricultural Department.

The raiyats have shown themselves most ready to accept any improvement properly brought to their notice, and which commends itself to their practical experience. For instance, an improved plough invented by an officer of the Department has been bought in large numbers. Again, in the Bardwán Division, having been shown the benefits resulting from the use of bone manure, they are purchasing it in small quantities; and as pandits have declared that there is no harm in doing so, it is expected that there will be no difficulty in disposing of large quantities of it for manure when the next paddy crop is being sown.

Owing to the absence of a village agency—a want which affects the Government of Bengal in every effort towards administrative reform—it has been impossible to prepare for Bengal returns of the area sown with each crop, as is done in other Provinces. On the other hand, the residence in the interior of almost every district of skilled men engaged in agriculture or trade, and willing to supply information, enables the Director to afford, as to the probable outturn of crops, information of the character on which traders are accustomed to act. His forecast of the jute crop, founded on the reports of some hundreds of skilled correspondents, has been favourably noticed by the Dundee Chamber of Commerce. He also supplied a valuable report on wheat and its adulteration, which will be of use to the trade.

Agricultural Shows were held at Dumráon, in the district of Sháhábád, in February 1885, and another at Baráhpur, in the same neighbourhood, in February 1886. Similar efforts have been made in the Purniah district, and recently a third exhibition was held at Dumráon in February 1887.

Under skilled supervision, and when supported by the public, such shows produce excellent results, in diffusing agricultural knowledge and in attracting the sympathy of the wealthy and intelligent classes to the details of the most general and indispensable of industrial pursuits. Indeed, if once the earnest co-operation of all landed proprietors could be given to such enterprises, the results would be remarkable; and, so far as they have gone, it is satisfactory to be able to record that these exhibitions have been most successful. The cultivators have shown the keenest interest in the competition and in the awards, and have purchased large numbers of improved agricultural implements, which were on exhibition there.

The period of two years, for which the Agricultural Department was sanctioned, expired at the end of 1886. It has been recommended to be established as a permanent institution, and the Lieutenant-Governor has been glad to notice that this view has the support of the Finance Committee and of the Government of India.

SURVEYS.

During the years 1882-83 to 1885-86 a revision of the survey in the district of Midnapur was in progress. It was practically brought to a close in the latter year. During the same period a survey was held of the ghátwálí lands in Bánkurá, Mánbhúm, and Singhbhúm. That in Bánkurá was stayed in 1884-85 on account of the great expense involved, but in the following year it was revived on a simpler system. These ghátwálí surveys promise to afford a settlement of many vexatious disputes. In 1884-85 the greater portion of the boundary between the North-Western Provinces and these Provinces was demarcated afresh. Mention of the projected survey of the town of Calcutta will be found under the head of Legislation.

The most important survey work, however, carried on during the period under review was the experimental survey in 1885-86 in pargana Bisára, in Muzaffarpur, under Chapter X of the Bengal Tenancy Act, including a record of rights and a settlement of rents. The cadastral survey was conducted by a professional party, and the record of rights and settlement of fair rents by officers acting under the immediate supervision of the Director of the Agricultural Department. The professional party recorded the areas of holdings, facts of undisputed possession, of crops grown, and of irrigation. The maps and measurement records of each village, as they were completed, were made over to the revenue officers, who proceeded to the village and determined and recorded the status and interests of all parties concerned. They also recorded the amounts of existing rents, and settled and recorded fair rents on the application of either landlord or tenant, or otherwise. The total area cadastrally surveyed to the end of June 1886 was 410 square miles. The rents were recorded and the status determined of 15,876 tenants, while fair rents were settled on the application of either landlord or tenant in cases of 3,546 raiyats. Three hundred and twenty-three boundary disputes were amicably settled, and in no case was an appeal made to the Special Judge from the decisions of the Settlement Officer. The total cost of both survey and settlement is estimated at about $8\frac{1}{5}$ annas per acre. The success of the work may be judged by the absence of those disputes and difficulties which were expected in connexion with it. In 1886-87, however, the orders of the Secretary of State were received that this experimental survey should, for the present, be abandoned.

Several other similar surveys have been sanctioned during the year 1886-87. The object in all cases has been the settlement of a fair and equitable rent and a proper record of rights. These are in both Government and wards' estates. In regard to private estates other than those under the Court of Wards, no action has as yet been taken under section 101 of the Act. One application has been filed from a private estate in Rájsháhí, and is still under consideration. Applications made under section 103 of the Act in Dacca and Maimansingh have been sanctioned; in other districts similar applications are pending. There would seem to be little doubt from what has already taken place that Chapter X of the Bengal Tenancy Act will have a special and beneficial interest for both landlords and tenants. It has been the Lieutenant-Governor's object to introduce its working with care and circumspection. An application under this section in Bardwán was rejected on the ground that it was not made by all the proprietors or by an agent authorised to act on behalf of all of them.

SETTLEMENTS.

In 1882 the Board of Revenue reported to Government the successful completion of the long pending settlements of the Noábád tálúks in the Chittagong Division; but on inquiry, reason was found for believing that the rights of the parties had not been fully considered, and accordingly a further investigation was ordered, which did not approach completion till the year 1884-85. Some questions still remained undecided in the following year, particularly whether the *khás taraf tálúks* and the resumed *lákhiráj tálúks* had properly been brought under resettlement. This last question was decided in the affirmative, with the result that nearly five thousand additional *tálúks* became open to resettlement, and the necessary orders were accordingly passed. In 1882-83 the raiyats on the extensive Khurdhá estate in Orissa raised objections to the terms of the settlement which had recently been concluded. The decision of Government on their objections had the effect generally of reconciling the malcontents. A complete record of rights was prepared in the fullest detail, serving as an effectual safeguard against the evils that have occasionally prevailed in other estates elsewhere. The settlement papers were finally revised in 1884-85, when no less than 85,294 *kabúliyats* were executed by the raiyats.

The important settlement of Mircha Dífr in the Rájsháhí Division, which occupied a prominent position in the settlement history of 1883-84 and 1884-85, was brought to a conclusion in 1885-86.

During the year 1886-87 several settlements in Chutiá Nágpur, to which the Tenancy Act does not apply, have been brought to completion. The settlement of the large estate of the Mahárájá of Chutiá Nágpur will be brought to a close at the end of the present season.

GOVERNMENT ESTATES.

Government estates are of two classes, viz. those which belong to and are managed by Government, and those which, though belonging to private individuals, are managed by Government on account of the owners refusing a settlement. The importance of the duties imposed upon Government in acting as the landlord of these estates may be judged from the fact that in 1885-86 there were 2,950 Government estates, with an approximate area of 5,420 square miles. Even these figures, however, do not give a complete idea of the number of estates under Government management. The Chittagong district is one vast network of Government estates, in number about 45,000; but for convenience of management they are divided into five circles, and each of these circles counts as only one estate in the above enumeration. Again, we may consider in this connection the 24 raiyatwári tracts, with an approximate area of 4,575 square miles. These, though not technically classed as Government estates, include all single estates or groups of two or more closely adjoining estates, the property of Government, with an area of not less than 5,000 acres, wherein the settlement is made direct with the raiyats. It thus appears that the Bengal Government is actually landlord over an area of almost exactly 10,000 square miles, or just one-third of the area of Scotland. Some of these are let out on farming leases, and as being independent of direct management

need not enter into present consideration. The following figures refer to the financial results, so far as they are known, of the direct management during the period under review :—

Year.	Number of estates under direct management.	Amount of annual rent-roll.	Collections.	Percentage of collections to annual rent-roll.
		Rs.	Rs.	
1882-83	1,061	26,27,000	28,60,000	108·8
1883-84 .. .	1,323	27,50,000	26,46,000	96·1
1884-85	1,251	28,06,000	27,27,000	97 1
1885-86	1,315	27,63,000	26,78,000	96·9

It will be observed that the above table only compares the collections with the current annual demand or rent-roll. In Government reports, for the purpose of criticising the work of individual officers, prominence is given to the proportion borne each year by collections to gross demands; and this has led to a mistaken belief, widely accepted, that on estates managed by Government little more than two thirds of the annual rent is collected. As a matter of fact the percentage of collections to the annual demand during the last ten years has been as follows.—

Years	Percentage
1876-77	99 6
1877-78	87 2
1878-79	100 0
1879-80	101 9
1880-81	104 8
1881-82	99 4
1882-83	108 8
1883-84	96·1
1884-85	97 1
1885-86	96·9
Average of ten years	99·18

The percentage obtained on the average shows that the collections have, taking one year with another, equalled the full current rental of the property.

For the management charges of Government estates the following provision is made. Ten per cent. of the total collections on all the estates concerned is appropriated to meet the cost of their management and improvement, and is entered in the provincial accounts as a land revenue receipt. From the assets thus set apart assignments are made by Government for expenditure on management proper, education, communications, and miscellaneous improvements to the respective departments which deal with the expenditure for these purposes. Thus a sum equal to 7 per cent. of the collections of each year is placed at the disposal of the Board of Revenue for allocation to districts on account of management proper, including petty settlement work, and ½ per cent. for works of improvement. The remaining 2½ per cent. is assigned to education and roads, and with this the Board have no concern. As soon as the year's grant is placed at their disposal, the Board make the distribution as the circumstances of the different districts demand.

The efforts hitherto made in the way of introducing improvements on Government estates cannot be said to have been of a systematic or extensive character. The chief reason for past neglect in this matter is doubtless the fact that there has never been at the disposal of the Government a trained agency for the management of its estates. One of the objects of the newly-formed Agricultural Department is the training of managers for Government and wards' estates.

As regards the amounts actually spent, it must be remarked that this arrangement was not in force in 1882-83. Since then the 2½ per cent. has been regularly allotted for education and roads. The following table compares the amount actually spent in each of the years of the period under review on works of improvement with the amount of rent annually collected.—

Years	Amount of collections	Amount actually expended on works of improvements
	Rs	Rs.
1882-83 ..	28,60,000	24,000
1883-84	26,46,000	55,000
1884-85	27,27,000	37,000
1885-86	26,78,000	55,000

It thus appears that the amount actually spent has considerably exceeded in each year the half per cent allotted, the excess being met by savings out of the 7 per cent allotment for management. As a matter of fact, however, really much of the amount debited to works of improvement should have been debited to the cost of management, for the greater portion of the money was spent on maintaining and keeping in good order already existing tanks, water-channels, embankments, and dams,—works which were necessary for the maintenance of the estates in good order, rather than for improving their condition. With the figures at command it is impossible to separate the works of real improvement from the works of maintenance, but the figures given above are sufficient to show how small a proportion of the annual rental of Government estates is at present spent on improvements. A local Government, if free to act in the matter, would probably do more.

Among the more important improvements actually undertaken for the benefit of Government estates during the period under review may be mentioned the Sarpái scheme of drainage works for the low country near Contai in the Midnapur district, mainly for the Majnamútá and Jalamútá Government estates. This was sanctioned in March 1882, and is now practically finished at a cost of Rs. 2,87,000 Commendable efforts were made in the Government estates in the town of Násrígani, in the Sháhábád district, for the improvement of the drainage, water-supply, and conservancy arrangements A fuller description of their efforts will be found under the head of Sanitation. As specimens of the minor agricultural improvements carried out from the ½ per cent. allotment, the following may be mentioned.—Wells and tanks have been excavated in considerable numbers, various irrigation and drainage works were completed, dams and embankments were repaired and constructed, and roads and bridges were built. Large areas of waste land have been reclaimed in Gaya, where also much more reclaimable waste has been settled with the raiyats. Several attempts have been made to introduce the cultivation of new staples

with varying success, and the use of improved cheap agricultural machines has been encouraged.

The system under which allotments for improvements is made has been recently under the consideration of the Lieutenant-Governor, and it is hoped that arrangements may be made whereby these allotments will be increased. It is satisfactory to note that the Agricultural Department has given an impetus to the cultivation of new staples on Government estates, and that experiments in this matter have been attended with a good measure of success.

The most noteworthy events connected with Government estates during the period under report were the difficulties experienced in the Majnamútá and Jalamútá estates in the Midnapur district. In 1882-83 Sir Rivers Thompson wrote:—"It is satisfactory that the labours of the special officer who was deputed to undertake the management of these estates have resulted in the establishment of more amicable relations between the raiyats and the representatives of Government, and it is hoped that there will be no recurrence of the difficulties in these estates." These hopes were not fully realised. Settlements were disputed up to the highest courts; and at length, with the view of closing long-pending litigation, it was decided to offer a reduction on the enhanced settlement rent of three annas in the rupee to the general body of raiyats, and to make this reduction the basis of a final settlement of all matters in dispute. With one exception, the Majnamútá tenants agreed to this compromise, but 103 of the Jalamútá tenants refused it and fought out the cases in the district court. These cases were all decided in favour of Government by the District Judge, an enhancement of 50 per cent. having been allowed on rice-lands in all except 14 cases, in which the assessment made by the Settlement Officer was left intact. It is hoped that this decision will be accepted as final. In round figures it may be said that the rental of the estates, which was enhanced under the settlement of 1874–79 from 3 lákhs and 31 thousand to 4 lákhs and 93 thousand, has now been fixed at about 4 lákhs of rupees.

WARDS' ESTATES.

There were altogether 165 estates of minors and disqualified proprietors in Bengal under the management of the Court of Wards at the end of the year 1886-87. In such estates the annual rent demand has ordinarily varied from 40 to 50 lákhs of rupees, with a cost of management of about 10 per cent. on the current rent and cess demand. In the year 1885-86 it suddenly rose to 93 lákhs, with a cost of management of less than 8 per cent., principally owing to the devolution upon Government of the management of the estates of the deceased Maháráját of Bardwán.

FORESTS.

The history of the Forest Department has been uneventful during the period under report. The area of reserved forests has steadily increased from 2,766,288 acres at the end of 1882-83 to 3,191,281 acres at the end of 1886-87, and the precautions taken against fire have generally been successful where applied. The principal failures were in the Jalpáigurí, Angul, and Singbhúm forests. A working plans division has recently been created in this Department, from which increased efficiency in forest administration is expected.

Turning to the financial results of the Forest Department, it must be observed that under this head figures of gross receipts are misleading, as the revenue of any year must depend largely on the expenditure of that year, and *vice versâ*. The following figures compare the net revenue in each year with the contract estimate of 1882 :—

	Contract estimate.	Actuals in 1882-83.	In 1883-84	In 1884-85.	In 1885-86	In 1886 87 (estimated)
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Receipts ...	6,28,000	6,94,000	6,94,000	5,72,000	6,80,000	7,20,000
Expenditure ...	3,96,000	3,82,000	3,88,000	4,12,000	4,00,000	4,70,000
Net revenue	2,32,000	3,12,000	3,06,000	1,60,000	2,80,000	2,50,000
Provincial share ...	1,16,000	1,56,000	1,53,000	80,000	1,40,000	1,25,000

POLICE.

The amalgamation of the municipal with the regular police, which was initiated during the last years of Sir Ashley Eden's tenure of office, was carried out during the year 1882-83. This change was introduced with the object of relieving municipalities from a heavy source of expenditure over which they could not, in the nature of things, be allowed to exercise any control. It was no part of the scheme to effect thereby any improvement in the administration of the police force. As a matter of fact, it had a contrary tendency. The men who belonged to the old municipal police were, as a rule, worse paid and worse disciplined than those of the regular force; their standard of education was lower, and their efficiency decidedly less. It has therefore not been a matter for surprise that their inclusion among the regular police should have occasioned an apparent deterioration of the whole force. The effect on enlistment of the grant of batta sanctioned in 1880 to constables of certain grades was to some extent neutralised by this amalgamation, the more constant work exacted in the performance of municipal duties having rendered recruits unwilling to enlist. Since then, however, the *morale* of the police has shown signs of steady improvement, and now its conduct and efficiency may be considered as on the whole satisfactory, though complaints are still made of want of detective ability and of inefficiency in some of the unhealthier, and hence more unpopular districts.

In 1882-83 the regular police system was introduced also into the Santál country, where it had been found that the people did not appreciate the motives of Government in allowing the police administration to be carried on through their headmen. The old village police were, however, still retained, and were required to work in subordination to the regular police.

The scheme, which was given a trial during 1881-82, for placing important outposts in charge of 5th-grade sub-inspectors in place of head-constables, was found to work so well that its general introduction was carried out during the years 1882 and 1883. It has since proved on the whole a decided success.

In the cold weather of 1882-83 a Commission was appointed to inquire into the working of the chaukidárí, or village police, system; and it submitted a report shortly after the commencement of the following year. The principal complaints had been that these chaukídárs were not regularly paid, and that

the panchâyats kept no regular accounts. Accordingly, a draft Bill came under the consideration of Government during the year 1885-86; in which, while retaining the panchâyat system, an endeavour has been made to provide for a better method of appointment of panchâyats, and for the more punctual payment of the salaries of the chaukîdârs. This Bill became law as Act I (B.C.) of 1886 during the year 1886-87. The measure affirms the principle that it is better to have the chaukîdâr as a servant of the villagers and subordinate to the principal men of the village than directly under the control of the regular police; and certainly if the panchâyats can be got to act up to their obligations and responsibilities the gain to the public interests would be great, by securing influential local co-operation in the prevention and detection of crime, and by constituting a local agency which could be utilised in other directions.

In the year 1884-85, for the purpose of closer supervision and readier control over the semi-military police employed in them, the Chittagong Hill Tracts were constituted a separate general police district under Act V of 1861, and the Commissioner of the Chittagong Division was appointed Inspector-General of Police therein. Another change during the same year was the revision of the strength of the police employed on the East Indian Railway, and the restriction of their duties to the maintenance of law and order, the Company making their own arrangements for the watch and ward of property. A scheme based on similar principles was drawn up by the Government for other railway lines in Bengal, and having received the provisional sanction of the Government of India, it was gradually brought into fuller operation in the following year, while at the same time the police on the Eastern Railway districts were organised under an Assistant Inspector-General, and on the Tirhût and Bengal and North-Western lines under the Assistant Inspector-General, East Indian Railway.

In 1882-83 an attempt was made to reclaim and settle a tribe known as Magahiyá Doms, whose nomadic and thievish habits had long rendered them a source of trouble to the police in Behar. A number of them were induced to consent to settle down in places selected for them in the Sáran and Champáran districts. Lands were procured from the local proprietors, huts were erected, and a Government grant was made to provide the new settlers with cattle, ploughs, and agricultural implements. Some of the headmen were also appointed village chaukîdârs with the approval of the villagers. By the close of the year the numbers living at the two settlements had increased to 340, who had abandoned their old practices and taken to peaceful occupations. Although in one year the outturn of their crops was exceptionally unfavourable, they were able to earn their living honestly. The success of the scheme is almost entirely due to the persevering labours of Mr. Henry of the Civil Service.

The following are the figures for serious crime during the quinquennial period under review:—

	1882	1883.	1884	1885	1886
Murders	271	264	266	268	247
Riots	1,890	1,953	2,090	2,193	1,310
Robbery	122	171	167	176	127
Dakáiti	121	118	165	164	99
Burglaries	17,773	18,800	21,276	22,950	20,740
Thefts	25,086	25,512	29,754	29,431	22,973
Total	45,263	46,818	55,718	55,202	45,496

It will be observed that there was a considerable increase in the years 1884 and 1885—the result of the bad harvests of those years, which caused much distress, and consequent breaches of the law. It may be noted that the great increase was under the heads of dakáití, burglary, and thefts, all of which are offences against property.

It cannot be said that the Lower Provinces are over-policed. Immense districts like Midnapur, Maimansingh, Gayá, and others, which could be named, have not sufficient police establishments for the ordinary duties of the Department. Taking it as a whole, there was in 1885-86 only one regular policeman to every 3,123 persons, the force being lightest in Behar, where the proportion was 1 to 3,778, and heaviest in Orissa, where it was 1 to 2,672. The cost of this force was only 7·6 pies per head of the population. Besides this force, there was a force of about 170,000 men employed as town and village police, not subject to the general rules. The question of the improvement and increase of the regular police of the Province must present itself to the attention of the Government more forcibly every year. The reform is simply stayed by want of means to pay for it. The contract grant made to this Province for police under the financial contract of 1882-83 was fixed at Rs. 41,32,000. From the beginning of 1882-83, however, the cost of police in mofussil municipalities was, as already stated, assumed by Government, and a charge of about 4½ lákhs per annum, for which the terms of the contract made no provision, was thus added to the provincial burdens. There was a set-off against this of about one lákh under the head of Medical, and half a lákh under Education, on account of various charges which were simultaneously transferred to Municipal Boards, and the net cost of this reform has been about 3 lákhs a year since the beginning of the contract. This was increased by Rs. 61,000 a year from the beginning of 1884-85, when by Act IV (B C.) of 1884 a similar measure of relief was extended to the Howrah and Suburban Municipalities, which now pay only Rs 49,000 a year for police, instead of Rs. 1,10,000 a year as formerly. In the course of the same year Sir Rivers Thompson offered on certain conditions to relieve the Calcutta Municipality of one lákh a year of police charges, but the offer was declined by the Commissioners. The amalgamation Bill now before the Council provides for the entire transfer of the cost of the Presidency police to Government; and this measure, if carried out, will lay a further charge of about three lákhs per annum on the provincial revenues But for this a special understanding exists with the Government of India.

The expenditure on police during each year has been as follows —

	Rs
1882-83 . . .	44,61,000
1883-84	45,86,000
1884-85	48,02,000
1885-86	46,83,000
Estimated for 1886-87	46,82,000

PRISONS.

During the past five years the jails at Dacca, Jalpáigurí, Baxar, Gayá, Ránchí, Darbhangá, Bogra, Maimansingh, Pabná, and Cháibásá, commenced under the previous administration, were completed. Expenditure for these objects was largely reduced in 1884-85, partly owing to the completion of

several important works, and partly to want of funds. The period under review saw no great change in the general system of prison administration. The policy under which prisoners sentenced to terms of imprisonment exceeding two years in length were transferred as far as possible to central jails was steadily enforced, and has done much to promote economy as well as the health and good discipline of the jail population. The best results have ensued from the freer adoption of the mark system, whereby prisoners whose conduct is uniformly good are enabled to earn the remission of a portion of their sentences; and an analogous system has also been introduced by which life-convicts, whose offences were not of such a kind as to render them permanently dangerous to society, are encouraged to hope for release after they have completed twenty years of their sentence.

The system of warder guards was found to work well, and the Lieutenant-Governor in 1882-83 sanctioned the substitution of warders for policemen in the reserve guards of all jails in the Province. All jails, with the exception of that at Alípur, where there is a military guard, are now guarded by warders. The change has been productive of some economy, and has also conduced to greater efficiency, the number of escapes having shown a notable and steady decline. In 1881 it was 37, in 1885 14, and in 1886 17. At one time there were symptoms of a want of proper discipline ,amongst the warders, and difficulty was experienced in finding recruits; but in 1885-86 a special allowance was sanctioned for warders in unpopular districts, and since then there has been a decided improvement in the guards, and the recruiting difficulty has disappeared. The best results continue to be obtained from the employment of convict-warders and overseers.

The employment of the prisoners was almost exclusively intramural, and as the larger jail buildings were one by one completed, a greater proportion of the prisoners was employed on manufactures. The weakly physical condition of the convict population renders it impossible to apply to them merely punitive forms of penal labour; and the steady decrease in the average number of convicts of late years has shown that the present system is sufficiently deterrent.

The conduct of the prisoners in jail was generally satisfactory, though the number of petty offences against discipline fluctuated considerably. The number of these offences, however, depends greatly on the opportunities existing for committing them, and these opportunities vary largely with the work upon which the convicts are employed For instance, the total number of these offences decreased from 56,564 in 1884 to 40,373 in 1886, because one large jail was only working half-time owing to depression in the jute trade, and because, elsewhere, there were stoppages of building work in which free artisans, possessing tobacco and other forbidden articles, had been coming into contact with the prisoners. There has been a steady diminution in the severer forms of punishment for jail offences. Sentences of flogging have decreased from 914 in 1881 to 396 in 1886, and reduced diet as a punishment was used in 1,403 cases against 11,669 in 1881, such punishment being inflicted only for the more serious offences.

The average death-rate during the past 22 years has been about 60 per thousand, and it is satisfactory to be able to record that (with the exception of the year 1882) this figure has never been approached during the period under

review. In 1886 the death-rate was only 37·2, the lowest on record. This improvement is due, in some measure, to the absence of severe epidemics, but also to the great improvements in jail buildings, and to sanitary arrangements carried out during the past ten years. Many of the prisons are now palatial residences compared with the mud huts which previously existed. One cause of the still too high death-rate is the bad health of many prisoners on their admission. So bad has it been, that many of them were never really subjected to prison discipline at all. No expense has been grudged for the provision of good accommodation, food, clothing, and medicines; and it is to the care and intelligence of the Superintendents that Government now looks to keep the death-rate down to the low rate recorded for last year.

In the early part of the period under review the Government of India prohibited the introduction of steam machinery into any jail, and directed that no European machinery driven by application of convict-labour should be introduced into any jail where it did not already exist. The Government of Bengal requested a reconsideration of this decision, and the orders were subsequently withdrawn.

The daily average population of the jails has shown a steady decrease since 1876, except in 1885, when it rose slightly from 15,101 to 15,177. In 1876 the number was as high as 20,227, and in 1886 it fell to 14,805·69, the lowest figure yet recorded. This gradual decrease is attributable to the prompter administration of the criminal laws and to the more efficient preventive action of the police.

There have generally been about a hundred boys in confinement in the Alípur Reformatory School. The success of this institution and the want of accommodation led to the further development of the system, and in September 1882 the Lieutenant-Governor sanctioned the opening of another reformatory at Hazáribágh In both institutions the discipline and health of the inmates have been good; and, with very few exceptions, the youths released on the expiry of their terms of confinement have taken to honest work, and have been reported to be doing well. The idea of having a training ship for Muhammadan juvenile offenders has been under consideration, but is not yet fully matured.

With regard to the financial aspects of the subject, in the case of jails the provincial financial contract has worked most unfavourably for the Local Government. On the receipt side the contract estimate was taken at 7 lákhs, which was almost wholly composed of the sale-proceeds of jail manufactures. Under this head the estimate was realised, except in 1883-84, when the orders of the Government of India restricting jail manufactures reduced the receipts to Rs 6,47,000. The unfavourable state of the jute industry during the period under review accounts for a decreased earning of nearly half a lákh of rupees a year in the Alípur Jail The total receipts from jails in each year have been .—

	Rs
1882-83	8,47,000
1883-84	6,47,000
1884-85	7,29,000
1885-86	7,45,000
Estimated for 1886-87	7,20,000

It is impossible to compare the expenditure under this head with the contract grant of 1882, which lumped together Law and Justice and Jails at Rs. 88,33,000, although it is certain that the expenditure has considerably exceeded the amount expected.

The actual expenditure has been—

	Rs.
1882-83	16,63,000
1883-84	16,97,000
1884-85 ..	16,77,000
1885-86	17,24,000
Estimated for 1886-87	18,41,000

The reforms mentioned in the earlier part of this section could not have been carried out without expenditure, and are mainly responsible for the increase. They include the reorganisation and complete equipment of the *personnel* of the superior staff, the development of the central jails at Dacca and Midnapur, the establishment of a district jail at Khúlná, the introduction of warder guards in place of police, the establishment of a new Juvenile Reformatory at Hazáríbágh, and the large expansion of the one at Alípur. These measures have cost nearly 1½ lákhs per annum. The rise in the price of food has also increased the cost of dieting prisoners by an equal sum, though the jail population has been steadily diminishing in numbers.

CRIMINAL AND CIVIL JUSTICE.

Very few changes occurred in the administration of criminal justice.

The number and powers of the courts were practically unaltered. There was a steady increase in the number of appeals; for instance, those made to the Courts of Session increased from 6,115 in 1882 to 9,067 in 1885, and this increase was not justified by the result of the appeals, for while in 1882 the original orders were modified or reversed in 33 per cent. of the cases, in 1885 the same result followed in only 28 per cent. In regard to trials by jury, complaints were annually made as to numerous failures of justice owing to the unwillingness of juries to convict In 1885, out of a total of 348 trials of this nature, there were as many as 66 in which the judge wholly or partially disagreed with the jury.

Between 1878 and 1883 the number of persons judicially flogged decreased from 4,739 to 1,261. In the following two years, however, the numbers somewhat increased, owing to large increases in petty offences against property, occurring in consequence of the high price of food-grain. This form of punishment is regarded as degrading by the mass of the people, and frequent recourse to it is not supported by public opinion in this country. It is satisfactory to find that full effect has been given to the injunctions of Government that this form of punishment should be reserved for a particular class of cases and be sparingly used.

With regard to civil justice, in the year 1881-82, owing to the long-recognised necessity for special measures to facilitate the disposal of appeals before the High Court, a scheme for the constitution of appellate benches in the interior was submitted by Sir Ashley Eden for the approval of the Secretary of State. The scheme proposed to establish four benches at Patná, Bardwán,

Dacca, and the 24-Parganás, each consisting of a covenanted officer and a member of the Subordinate Judicial Service. It was hoped that by this means the appellate work of the High Court would be materially reduced. The Hon'ble Judges of the High Court, however, were never very favourable to the arrangement; and when the matter came up for disposal, Sir Rivers Thompson considered that the financial circumstances under which his predecessor had been able to promise his support to the scheme obtained no longer. No provision had been made in the provincial contract for the large outlay involved, and it certainly could not be borne by the provincial revenues in their present condition. Beyond this it seemed to the Lieutenant-Governor that a much simpler expedient by which the already existing judicial agency at the principal stations could be used to constitute appellate benches would meet all the necessities of the case. Since then no orders have been passed by the Government of India.

The arrears before the High Court continued to show a steady increase up to the end of 1884. At the end of the following year, however, they showed a large diminution owing to a temporary increase of three in the number of the High Court Judges, appointed on account of the accumulation of arrears.

In the Calcutta Small Cause Court there was a great decrease in the number of suits instituted in 1883, which was the first year throughout which the Presidency Small Cause Court Act, XV of 1882, was in force. In the following year there was a considerable rise in the number of institutions, which was ascribed partly to the new procedure having become more popular, and partly to the fact that creditors had now enhanced security for their loans on being able to attach and sell tiled huts.

During the year 1880-81 the question of improving the training of officers of the Covenanted Civil Service who elected the judicial branch of the service was under the consideration of Sir Ashley Eden, and a tentative scheme was proposed by him and sanctioned in the following year by the Government of India, which would, it was hoped, remove the defects of the system under which officers were called on to perform the important duties of a District Judge without any experience in the administration of civil justice, and with no experience of criminal justice beyond that afforded by the work of a Joint-Magistrate. In furtherance of this scheme, in 1881-82 several Covenanted Civilians, whose duties had hitherto been confined to executive and criminal judicial work, were invested with powers as Civil Judges, according to the length of their service: some with the functions of a Subordinate Judge, and others with those of a Munsif. The scheme was on its trial during the two following years with very little success. It was an attempt to obtain from officers already overburdened with their own duties work of a new and technical character. It was found to have occasioned a greater amount of inconvenience than was at all commensurate with the advantages to be expected from it. At length in 1883-84 it was pronounced a failure by the High Court, and its abandonment recommended.

Special inquiries were made in 1883 as to the feasibility of extending the jury system in districts other than those seven in which it now obtains. Judged by the comments of the vernacular press, the subject had a special interest for

natives. Everywhere the suggestion was opposed by the local Judges, on the ground chiefly that there was not a sufficient number of educated Natives in the districts to form a qualified jury list. The High Court Judges also were opposed to the measure.

Turning to the financial aspect of the administration of justice, the Provincial financial contract of 1882, as in the case of jails, has worked unfavourably for the Local Government under the head of Law and Justice (proper). On the receipt side the contract estimate was taken at 9 lákhs, including an item of 8 lákhs under the sub-head of general fines, fees, and forfeitures. The receipts from fees and fines, however, have never come up to the estimate, and the total receipts under Law and Justice (proper) have been only—

	Rs.
1882-83	8,23,000
1883-84	7,64,000
1884-85	7,55,000
1885-86	7,55,000
Estimated for 1886-87	7,65,000

The diminished receipts from judicial fines are in themselves a not unsatisfactory symptom, but their effect on the provincial revenues is none the less unfortunate.

With regard to expenditure under this head, it is, as explained under the head of Jails, impossible to compare it with the contract grant of 1882; but the fact that the expenditure under these two heads in 1885-86 was Rs. 96,28,000, against a contract estimate of Rs. 88,33,000, will be an indication as to the degree to which the Law and Justice (proper) share of the contract grant has been exceeded. The actual expenditure under this head during the quinquennial period has been—

	Rs.
1882-83	76,13,000
1883-84	76,21,000
1884-85	77,29,000
1885-86	79,38,000
Estimated for 1886-87	77,87,000

The greatest increase in expenditure occurred in meeting the constant demands for additional facilities for obtaining justice, and for improvements in the judicial machinery; and though the scanty resources at Sir Rivers Thompson's disposal have rendered it impossible hitherto to find more than 5 lákhs a year for this object, it seems certain that before long either measures must be taken to reform the constitution of our courts in the interior, or much more liberal assignments will have to be provided. During the past five years the pay of the Subordinate Judicial Service has been improved at a cost of about 1½ lákhs a year. Seven Subordinate Judges and 12 Munsiffs have been added to the permanent staff, while numerous temporary officers have been appointed. Three Additional Judges have been temporarily appointed to clear

off arrears in the High Court. In the Lieutenant-Governor's opinion it is not so much the increase in litigation which leads to these constantly recurring demands as the imperfect constitution and working of our local courts, the time wasted by their protracted proceedings, and our interminable appellate system.

REGISTRATION.

The popularity of the Registration Department has steadily grown. This is no doubt partly due to improved administration, and to the continuous introduction of rural in place of official agency; but the great increase in the number of registrations which are not compulsory but optional, is a proof that the benefits of registration are becoming more widely understood. In 1882-83 the total number of registrations was 555,141, while in 1885-86 it was 723,901. In the latter year optional registrations were 46·67 per cent. of the whole number; and, compared with the figures for the preceding year, rose by 7·72 per cent. It is expected that for the year 1886-87 there will be found to have been a decrease in the total number of registrations. This has been caused by the good crops of the year, as the people are not compelled to borrow money or to sell or mortgage property, to anything like the same extent as that to which they are compelled in a bad year. Still it is expected that there will be found to have been a *proportionate* increase in optional registrations as compared with compulsory ones. It is anticipated that in the year 1887-88, when the Tenancy Act will have become better known, there will be more registrations than in any previous year. There has been throughout the whole period a remarkable excess in the number of counterparts over the number of leases registered. In 1885-86 the proportion of the latter to the former was only about 25 per cent. This is accounted for by the fact that the raiyat has to pay the cost of both documents, by the unwillingness of the zamíndárs to bind themselves in writing, their unwillingness to attend at registration offices, and their wish to prevent the raiyat from using the lease as a valuable security for the purpose of raising money. It is satisfactory to note that the figures for the period referring to the transfers of immovable property show that the agricultural classes are not parting with their interests in the soil, and that mahájan and money-lending purchasers are not so numerous as is sometimes alleged.

The registrations of Muhammadan marriages have steadily declined in number since 1878-79, when the number was 10,637. In 1885-86 it was only 7,524. A committee of Muhammadan gentlemen appointed to revise the earlier rules and procedure submitted a report in January 1884, and their proposals were accepted. A permanent committee, similarly constituted, was established in Calcutta to supervise the working of the new arrangements, and to deal with matters connected with the nominations to the appointment of Kází and marriage registrar. Act XII of 1880 for the appointment of Kázís was extended to the fourteen districts in which Act I of 1876 was then in force, and the offices of Kází and marriage registrar were united. These changes, although accompanied by relief in the price and form of registers, have not, it is to be regretted, led to any greater appreciation of the Act than in former years. As long as the Muhammadan community differ among themselves as to the possibility of making the law compulsory, it is to be feared that the present Act will remain comparatively without any practical effect.

The following figures compare the net revenue in each year with the contract estimate:—

	Contract estimate	1882-83.	1883-84.	1884-85.	1885-86.	1886-87 (estimated).
	Rs.	Rs.	Rs	Rs.	Rs.	Rs.
Receipts	9,92,000	10,40,000	9,82,000	10,82,000	11,10,000	12,10,000
Expenditure .	6,09,000	6,28,000	5,58,000	5,94,000	6,00,000	6,38,000
Net revenue	3,83,000	4,12,000	4,24,000	4,88,000	5,10,000	5,72,000
Provincial share	1,91,000	2,06,000	2,12,000	2,44,000	2,55,000	2,86,000

From 1883-84 revenue record-room receipts and charges were transferred from the head of Registration to that of Land Revenue. These averaged about Rs. 85,000 and Rs. 70,000 a year respectively, so that the net revenue under the head of Registration has really been about Rs. 15,000 a year more since 1883-84 than appearsa bove. Allowing for this, it will be seen that the net revenue from this source has increased in five years from Rs. 3,83,000 to Rs. 5,87,000, or by over 53 per cent., while the profit of the provincial Government has amounted to Rs. 3,08,000 during the whole period of the contract.

MUNICIPAL ADMINISTRATION AND LOCAL SELF-GOVERNMENT.

The third general election of Commissioners for the Corporation of Calcutta was held in September 1882 under the Calcutta Municipal Act IV (B.C.) of 1876. A marked increase of public interest was displayed on this occasion, and the contest for seats in several of the wards was remarkably keen. The gross number of votes recorded was greater by upwards of 80 per cent. than the number recorded at the last election, held in 1879, and it now became clear that the substantial powers that were wielded by the Commissioners, and the responsibility under which they had been placed had invested the office with a dignity and importance which were much coveted by the intelligent classes of the Native community. The election also elicited another very important and satisfactory fact. Of the 48 Commissioners who held office prior to September 1882, 22 were re-elected and 26 were either not candidates or were rejected by the constituencies; and it appeared that while of the former all but four were conspicuous for their industry and attention to municipal work, as judged by the number of meetings attended, only four of the latter seemed to have given any considerable portion of their time to their duties as Commissioners. These facts indicated that the conduct of the members of the Corporation was keenly scrutinised by the rate-payers who had votes. The fourth general election took place on the 15th December 1885. The number of voters was less than in 1882, owing to the more rigid scrutiny exercised in examining claims for registration as voters; but in other respects the circumstances of this election were very similar to those of the previous one.

Much public criticism was directed to the sanitary condition of Calcutta during the period under review. An important memorial on the subject, numerously and influentially signed, was presented to the Lieutenant-Governor in January 1883. Subsequently, in July 1884, another memorial, signed by a large number of residents, was presented, praying that a Commission might be appointed to inquire into the sanitary condition of the town. The Commissioners having rejected a proposal made thereon by the local Government inviting their co-operation in such an inquiry, the Lieutenant-Governor appointed a Commission under the Act, consisting of the Sanitary Commissioner, Mr. (now Mr. Justice) Beverley, and Mr. Cotton, the nominee of the Commissioners. The Commission after detailed inquiries submitted an exhaustive and valuable report, with their recommendations for various improvements. Action has been taken on many of their suggestions, but the full adoption of all these recommendations depends upon amendments of the law which are now before the Legislative Council.

In 1882-83 the negociations between the Corporation and the Suburban Municipality regarding the extension of the water-supply were brought to a conclusion, and the engines for the new works, as well as the 48-inch iron main by which the water was to be brought to the town, were ordered from England The main was laid and opened by the Lieutenant-Governor in March 1886, but the suburbs were unable to raise funds for the works required to distribute the water within that municipality, and the actual extension of the water-works system will probably have to wait till the town and suburbs are united for municipal purposes.

In 1885-86 the income of the municipality was Rs. 27,78,000, and the expenditure Rs. 29,68,000. The total loan liability was Rs. 1,56,42,000.

During the last five years, and even from an earlier period, complaints were frequently made as to the insanitary condition of the suburbs immediately surrounding the town of Calcutta; and it was strongly urged that to effect any improvement in the former they should be united with the town under one system of municipal government. Indeed, the necessity of the measure was recognised so long ago as 1864, both by the late Justices of the Peace for the Town of Calcutta and by the then Lieutenant-Governor of Bengal. Accordingly Sir Rivers Thompson, in a Resolution dated the 20th June 1885, appointed a Committee, under the presidency of the Hon'ble H. J. Reynolds, C.S., C S.I., to prepare a scheme for the amalgamation of the urban portions of the suburbs with the town.

In the meantime the Government of India, in a letter dated the 31st August 1885, entirely supported the Lieutenant-Governor in his action towards the Calcutta Corporation, laying down distinctly that no question of remission of municipal taxation could possibly arise until it was shown that all important sanitary improvements are adequately provided for, and that income should be maintained at the maximum until the town is properly cleansed, drained, and watered. The Secretary of State fully supported the authorities in India, and the Army Sanitary Commissioners recorded a memorandum in which they pointed out that nowhere could the plea of local self-government be set up as any excuse whatever for averting public interference, and advocated a more liberal expenditure on sanitary work. They also expressed their approval of the prospect of the greater part of the vast population of the city and

suburbs being placed under one consolidated administration at no distant date. The two areas, they wrote, are so connected that even now it is scarcely possible to ascertain what the death-rate of either area amounts to; and even if Municipal Calcutta were entirely freed from localising causes of epidemics, it would by no means follow that the public health would be safe from disease causes left to develop epidemics in the immediate vicinity of the improved area.

The Committee submitted their report on the 10th December 1885. They recommended the inclusion of the seven suburban wards named in the margin within the limits of the Metropolitan municipality, and stated that, to give effect to their scheme, the existing municipal law [Act IV (B.C.) of 1876] under which the affairs of the town were regulated should be altered. Accordingly a Bill to consolidate and amend the law relating to the Municipal affairs of the Town and Suburbs of Calcutta was introduced in the Bengal Legislative Council on the 10th April 1886. It was allowed to remain before the public until the Legislature met again on the 27th November last, when, with some remarks from the President and Member in charge, it was referred to a Select Committee. Briefly, its provisions as they then stood are as follows:—

	Population.
1 Entally ...	25,000
2 Baniapúkar	18,000
3. Ballygunj and Tolleygunj	20 000
4. Bhawánipur	38 000
5 Alipur	13,500
6 Ikbálpur	16,000
7. Watgunj and Garden Reach	28,000
Total	158,500

The new Corporation will consist of 75 members, of whom 25 will be appointed by the local Government and 50 elected by male persons resident within the limits of the Corporation, who shall have attained the age of 21 years, who were owners or occupiers of property valued at not less than Rs. 300 per annum, or who paid a license-tax on professions, trades, or callings of not less than Rs. 25 per annum, or who paid a tax of Rs. 24 a year on account of carriages and horses, or who were Fellows or graduates of the University of Calcutta. The Bill contains certain new provisions regarding the manner in which the members of a joint family, or a partnership or firm, shall exercise their right of voting. It gives a maximum of six votes to joint owners of a property valued at Rs. 1,800 or upwards per annum. A person qualified to vote is held to be qualified to be elected a Commissioner. For purpose of the election of Commissioners, the town is divided into 25 wards, and each ward is to elect two Commissioners. Votes at all elections shall be given personally at the polling stations. It is proposed to recognise by law the existence of the Town Council. It will consist of 15 members, of whom 10 are to be elected by the elected Commissioners of the 25 wards, united into five groups according to the contiguity of their situation. The remaining five members are to be appointed by the Lieutenant-Governor from among the appointed Commissioners. The Bill also proposes to give a fee of Rs. 20 to each member of the Town Council for each attendance at a meeting of the Council. These are the principal provisions of the Bill. There are other minor amendments made in the existing law, but they are too many to be enumerated here. The only new taxes which it is proposed to levy are a conservancy rate not exceeding three per centum on the annual value of holdings, and a storage fee of four annas upon every case of petroleum brought within the limits of Calcutta for storage or consumption within those limits. The Bill abolishes the police-rate in both the town and suburbs,

amounting in the case of the former to about Rs. 2,82,000 a year, and of the latter to about Rs. 37,000. It is proposed to levy the conservancy rate with the same maximum as the police-rate, and from the same class of rate-payers; and it is intended that the town shall contribute the sum so levied towards the improvement of the suburbs. The main results, therefore, will be that the available resources of the town will be neither increased nor diminished by the arrangement; the suburbs will be assisted to the extent of three lákhs, but will have to pay themselves also more than they pay at present in taxation; and Government will assume the responsibility of over three lákhs a year, than which no better evidence of their interest in the scheme could be supplied. Mr. Reynolds's Committee calculated that the Municipal revenue of the new Calcutta will be about 34 lákhs of rupees; whereas in the present town the annual income is about 28 lákhs, exclusive of the police-rate. The present town consists of about six square miles: the new metropolis will cover about 18¼ square miles. The population of the town now within the jurisdiction of the Corporation amounts to about 400,000; the additional number to be included will be about 182,000. The total result will not make Calcutta as large or as populous as the Bombay Municipality, which contains about 22 square miles and 800,000 inhabitants. Generally it may be said that while the Bill recognises the full freedom of the Commissioners in the conduct of the affairs of the Municipality, it reserves completely the right of interference on the part of Government, where circumstances demand intervention; that though the area of the Municipality is extended, the number of Commissioners should not be increased; that the constitution of a Town Council should be clearly defined, and that measures should be taken for a fair representation of every section of the community.

The Bengal Municipal Act III (B.C) of 1884, which came into operation on the 31st August 1884, was in force in 133 municipalities in these Provinces during the year 1885-86. This Act has already been dealt with under the head of Legislation It is satisfactory to record that its working has on the whole been satisfactory, and that the elected Commissioners generally took much interest in the affairs of their respective municipalities. During the year 1885-86 the total income of the municipalities amounted to Rs. 26,33,000, and the expenditure to Rs 27,36,000. The disposal of the whole of this large sum of money was entrusted to Local Committees, in all of which the elected element was largely preponderant.

The Bengal Local Self-Government Act, III (B.C) of 1885, which has been already dealt with under the head of Legislation, came into force in the 16 districts mentioned in schedule III of the Act on the 1st October 1886. Rules under the various clauses of section 138 of the Act—a work involving the careful consideration of innumerable details—have been passed, and District and Local Boards have been constituted. Funds have been placed to the credit of District Boards by the transfer of the balances of the District Road Committees under the Cess Act on 1st October 1886. The District Boards have also been vested with the powers of the Magistrate under Chapters I to IV of the Cattle Trespass Act, 1 of 1871. Elections for the Local and District Boards have been held, with a fair general measure of success, and it is hoped that the reports of future years will show that the people of Bengal have used rightly, and have appreciated the responsibilities of local self-government, now entrusted to their charge.

PORT TRUST OF CALCUTTA.

During the period under review the work done by the Port Commissioners continued to maintain its high character, and efficiently provided for the requirements of the mercantile public. Much activity was shown in all the minor departments under their control, and valuable work has been done in facilitating the navigation of the river and the port approaches, and in removing difficulties in the way of the sea-going trade of the capital. In 1883-84 the sanction of Government was accorded to the construction of a wharf on the Howrah foreshore road, and of a line of railway between Shálimár and the terminus at Howrah, and the work was completed in 1885-86.

The question of affording increased facilities to the trade of Calcutta is one which has been under the consideration of Government from time to time since so long back as the year 1839. In that year a project for constructing docks at Diamond Harbour was brought before Government by Captain Boileau. In the years 1844 to 1846 the subject was again brought prominently forward, and a Committee appointed under the presidency of Lieutenant-Colonel Forbes, R.E., recommended in May 1846 the construction of wet-docks at Kidderpur in preference to the Diamond Harbour scheme. The question was revived again in 1847, and Mr. F. W. Simms, C.E., Director of the Railway Department, examined very fully the proposals of a "Calcutta and Diamond Harbour Dock and Railway Company." He came to the conclusion as between Diamond Harbour and Kidderpur, that one site possessed no great advantage over the other. Lord Dalhousie, however, in a minute dated the 20th April 1853, emphatically condemned the Diamond Harbour project. Various schemes for the construction of wet-docks in the suburbs of Calcutta, viz. at Howrah, at the Botanical Gardens, at Chitpur, at Sealdah, at Kidderpur, and at Akra, were at different times submitted to Government, but the sites on the Howrah side of the river were condemned as inconvenient for business, and the Akra site as distant and of doubtful accessibility. The advantages of the sites at Kidderpur and Chitpur were almost equal, but no action appears to have been taken at the time in the matter, as it was considered that the construction of jetties would probably meet the necessities of the port as they then stood. In 1881 proposals were again submitted for the construction of docks at Diamond Harbour, and a strong Committee was appointed in the month of December of that year to report on the scheme. In the report the majority of the members were in favour of it, but the merchants in a body opposed it on the ground of the increased expense which double establishments and offices at Calcutta and Diamond Harbour would entail. Apart from this there were serious objections to this site on account of its exposure to cyclonic waves, and the difficulty of taking large vessels into docks on what would be for some months of the year a lee shore. It was at this stage that the question came before Sir Rivers Thompson, and by him a General Committee comprising several mercantile members was again appointed in 1883 with the object of instituting inquiries as to the measures possible for extending the present accommodation of the port, and the cost at which this could be provided. After a most thorough inquiry the Committee reported that 21 jetties might be provided on the Calcutta side of the river in positions where they could be erected without causing public inconvenience, and 20 on the Howrah side between the Botanical Gardens and the lower

boundary of the port. But they estimated that the same amount of accommodation could be provided in a wet-dock at not much greater cost, and they pointed out that vessels lying at jetties would have neither the security nor the convenience afforded by a well-arranged wet-dock. They considered it also most undesirable to divide the accommodation, and to place half on the Calcutta and half on the Howrah side. Jetties, though they might cost less in the first instance than docks, would cost more to maintain. The Committee therefore thought the construction of wet-docks was the best and the most economical of all measures for affording the increased accommodation required for the commerce of Calcutta. They also considered the Kidderpur site to be the most suitable for the purpose. After further inquiries conducted by selected medical officers as to the sanitary conditions of the proposal, the scheme, which was strongly supported by the Lieutenant-Governor, received the sanction of the Government of India and of the Secretary of State. It consists of an outer dock and an inner one with entrance to the river through a tidal basin. From the tidal basin, which will occupy an area of 9¾ acres, to the river, there will be two entrances, 80 and 60 feet wide; the 60-feet entrance being a lock 450 feet long, but with intermediate gates to take in vessels of less than 300 feet length and light draught. The tidal basin will communicate with the outer dock, which will be 2,630 feet long and 600 feet broad, with 6,550 lineal feet of quay space, sufficient for the accommodation of 14 vessels. The inner dock will be 4,700 feet long and 600 feet broad, with a quay space of 10,630 lineal feet sufficient for 20 steamers and sailing vessels at the same time. In this dock a frontage of 2,200 feet will be set apart for the discharge of salt ships, and here large warehouses, specially designed for salt, will be provided capable of accommodating 50,000 maunds of merchandise, with ample room for extension. Accommodation will also be provided in the docks for the coal trade and ballast ships, a quay space of 1,500 feet being appropriated for the purpose. The remainder of the quay space in the inner dock will be arranged for export, with a large shed at each berth for the collection of cargo The supply of water for the docks will be drawn from Tolly's Nullah, which will be provided with locks, and improved as well as extended by Government so as to bring the boat traffic of the Province through the canal system into direct communication with the docks. To connect Tolly's Nullah with the docks a canal will be cut, the entrance to which will be provided by a lock 300 feet long and 40 feet wide. The docks will be connected with the jetties and inland vessels' wharves by an extension of the river bank railway from Chándpál Ghát to Kidderpur, and with the Sealdah terminus by a direct line of railway The cost of the scheme will be 300 lákhs of rupees, to be raised by loans by the Port Commissioners on the guarantee of the Secretary of State. The works have been taken in hand, and it is believed that they will be completed before March 1889.

In September 1882, in consequence of the growing importance of the petroleum trade of the port of Calcutta, the leading firms of the town interested in it petitioned Government for the provision at Matiaburj of suitable accommodation for landing and storing petroleum. This arrangement after some inquiry was accepted as a temporary measure until the question of the further extension of port accommodation generally was settled. It was held by Government that the scheme, which was then under consideration, for improving the port accommodation by constructing docks or jetties at or near Garden

Reach might interfere with the permanent selection of Matiaburj as a petroleum depôt, and that the depôt should be placed at Diamond Harbour. The unanimous adoption of the Kidderpur Dock scheme eventually enabled the Port Commissioners of Calcutta to take up the subject, and a special Committee appointed by them for the consideration of the question came to the conclusion that there were serious objections to making Diamond Harbour the landing place for petroleum, and recommended that Port Canning should be selected for the purpose. In this view the Bengal Chamber of Commerce concurred. Their objection to Diamond Harbour as a landing place was based on the risk and expense of landing the oil by boats and the double handling of the cases which it would have involved. Somewhat similar objections existed to Port Canning, and finally it was suggested that Budge-Budge should be made the depôt. This proposal found general acceptance, and the Commissioners having adopted the report of the Committee, approved the plan and estimates, which they submitted for the sanction of Government in accordance with the provisions of section 35 of Act V (B.C.) of 1870. These were sanctioned in December 1884; and the work, which was for some time stopped for want of funds, was completed in July 1886, and the wharf declared open for traffic on the 10th idem. The southern limit of the port of Calcutta has been extended to below Budge-Budge in order to bring the wharf under the legal control of the Commissioners, and to enable them to compel vessels carrying petroleum to stop and discharge their cargoes at the new wharf. By this arrangement the danger to the shipping in the port proper, which was brought prominently to notice in 1883-84 by the conflagration in port of the ship *Aurora*, laden with kerosine oil, will be in a great measure obviated. It remains for consideration whether the Port Commissioners' line of railway, which goes as far as Akra, should not be extended to Budge-Budge for the convenience of the trade and the greater security of the port.

MANUFACTURES AND MINES.

The following is the outturn of indigo, so far as is known, since 1881-82. Figures of 1886-87 are not yet forthcoming :—

	Mds.
1881-82	1,50,000
1882-83	1,59,000
1883-84	1,67,000
1884-85	1,09,000
1885-86 (estimated)	1,30,000

The Lieutenant-Governor has, during the period of his administration, given much attention to the important subject of indigo cultivation in Behar. It has been his object to promote the permanent interests of this most valuable industry by removing the abuses to which it may be liable. In this he has been ably supported by the responsible officers of Behar, as well as by the Behar Indigo Planters' Association; and it is with much pleasure that Sir Rivers Thompson has recognised the success which has attended their efforts, and the satisfactory relations which have been established between planters and cultivators. It is understood that the cultivation of indigo now rests on a sound commercial basis, and is advantageous to all parties.

The following is the outturn of tea in the Lower Provinces since 1882-83 :—

	lbs.
1882	11,171,000
1883	10,703,006
1884	11,740,000
1885	14,050,000
1886 (estimated)	14,331,000

With the exception of the year 1883, there has been a steady increase of the outturn of tea in these Provinces. In 1883 the short crop, which was due to the unevenly distributed rainfall of the year and to the prevalence of blight and red spider, was in part counterbalanced by higher prices induced by a short crop in China and by apprehensions of a Franco-Chinese war.

A few experiments have been made in the Chutiá Nágpur Division in coffee-planting, but the results have been disappointing.

The Government cinchona plantations and factory have continued in a satisfactory condition during the period under report. Besides yielding a handsome profit, these institutions are instrumental in causing a great saving to Government medical institutions through the substitution of febrifuge for quinine. The outturn of the factory has diminished of late owing to the low price at which quinine is now obtainable in the market, and also to the presence in the depôts of a large quantity of London-made febrifuge sent out for sale under instructions from the Secretary of State.

The manufacture of silk continues to decline owing to lower prices and to the inferior quality of the cocoons. Measures are to be taken in hand in connection with a recent conference in Calcutta to improve the quality. Tassar silk is an exception to the general rule, and there is now a steady demand in Europe for cloth manufactured from this class of cocoons.

The lac trade has been more or less depressed during the period under review. In 1883-84 there was a short supply of stick-lac, and in the following year, though there was a larger production, the prices were unremunerative.

The manufacture of cotton cloth has been showing a steady decline, owing to the competition of European piece-goods and to the successful rivalry of the Bombay mills, which are more favourably situated in respect of the cotton-producing districts. Nevertheless, certain qualities hold their own—thus, there has been a revival in the trade of Pabná *dhótís*, and it is estimated that at the Howrah *hát*, which is the chief mart for the cotton goods of Húglí, Howrah, Midnapur, and parts of Nadiyá, the sales of country-made cloth amount to 18 lákhs a year.

The trade in jute has been depressed during the greater part of the period under review. In Northern Bengal the manufacture of gunny-bags is steadily decreasing, and they are being supplanted by mill-made bags.

The manufacture of pottery and glass is progressing In Bákarganj the manufacture of glass, lamps, and tumblers has been commenced, and an enterprising potter in Faridpur is making very fair pipes of 12″ diameter, which are useful for village roads. The Patná glass was much admired at the Colonial and Indian Exhibition in London in 1886. Glass manufactured after old native designs was much sought after; but the imitations of European patterns and colours, which are now being made in considerable numbers, and of which there were several samples at the Exhibition, found few admirers. Messrs. Burn and Company's potteries have continued to increase

in importance and in the employment of large numbers of Native workmen, though in 1885 they turned out a smaller value of products, mainly owing to the stoppage of Government works.

The Barákhar Iron Works, which had been purchased by Government, have been successfully carried on at a profit, and are capable of very large developments.

The output of coal has revived slightly, but complaints are made about the low price realised. It is difficult to estimate the total output, which is probably something over a million tons.

The manufacture of sugar has varied closely with the prosperity of the cultivators, while that of saltpetre in the Patná Division is showing a marked decline, and is not likely to revive under the present revenue rules, which do not favour the petty manufacturers of the crude article.

Paper manufacture in Sháhábád and Gayá is on the decline, and fast succumbing to the competition of machine-made paper turned out at the Couper Mills at Lucknow.

CALCUTTA INTERNATIONAL EXHIBITION OF 1883-84.

In the year 1883-84 an international exhibition was held in Calcutta. It was the first undertaking of its kind in India. The idea of having an Exhibition in Calcutta of the products of the Indian Empire was under the consideration of the Lieutenant-Governor, when, in October 1882, M. Jules Joubert, who had before successfully promoted International Exhibitions in Australia, arrived in this country and suggested the wider project. With the consent of the Government of India, and with a promise of assistance from other local Governments, Sir Rivers Thompson gave his sanction and support to the undertaking, and preparations were commenced in January 1883 under the supervision of a General Committee. For the collection of samples of the products and manufactures of India the Bengal Government provided a sum of Rs. 50,000, which was distributed by the Government of India among the different local Governments; and in all cases the allotments thus made were supplemented by grants made by the local Governments from their own funds. A sum of Rs. 10,000 was at the same time placed in the hands of an Executive Committee for the collection of exhibits in Bengal. Many exhibits were also lent by Native and European gentlemen in India, and the Calcutta community furnished and equipped a separate court entirely at its own expense. Three of the Australian colonies, viz. Victoria, New South Wales, and South Australia, appointed Commissioners to promote the objects of the Exhibition, and official representatives were sent to the Exhibition by the colonies of Ceylon, the Straits Settlements, Tasmania, British Guiana, and Mauritius. From foreign countries delegates were sent by the Government of Austro-Hungary, by the French colonies of Cochin China and Tonquin, and by the Dutch colony of Batavia, and Great Britain, France, Germany, Italy, Belgium, Turkey, Japan, and the United States of America were represented by exhibitors. The Exhibition was held in the Indian Museum building, and in extensive temporary buildings constructed by the Public Works Department. The total space enclosed for the Exhibition amounted to nearly 22 acres. Even this space was, however, insufficient for the proper display of the exhibits, which in some courts were overcrowded, and numerous applications for space had to be refused. The total number of exhibitors in all the

courts of the Exhibition amounted to 2,500. The exhibits exceeded 100,000 in number, and 3,590 certificates of merit with medals were given. The Exhibition was managed by the Executive Committee acting in concert with M. Joubert. It was opened by Lord Ripon on the 4th December 1883, and was closed also by the same Viceroy on the 10th March 1884. The total number of persons admitted into the Exhibition exceeded a million. The number of visitors continued to increase before the closing of the Exhibition; and as its fame extended only gradually to distant places in the interior, it would certainly have attracted visitors for a much longer time if circumstances had permitted it to remain open. The gross expenditure on the Exhibition amounted in all to Rs. 5,77,907-12,* and the total gross receipts amounted to Rs. 5,02,858-2. A report on the Exhibition has been published, giving an exhaustive account of the circumstances under which the Exhibition was held, and describing with much detail the exhibits which were brought together.

* (Rs. 5,04,248-12 + Rs 60,000 + Rs. 13,659 cost of police)

No adequate notice of the exhibits gathered together in the different courts can be here attempted, but the relative proportion of the numbers of the exhibits represented may be gauged from the fact that the catalogue of the exhibits from the Indian Empire took up the whole of the last volume of the report, consisting of 722 pages; the catalogue of the exhibits from Great Britain occupied 35 pages; that of exhibits from British Colonies, 154 pages (of which 123 pages were monopolised by the Australian Colonies); and that of exhibits from foreign countries, 55 pages. The beautiful collections of art work in the Indian Courts will perhaps be most vividly recollected by those who visited the Exhibition; but the solid merits of the collections of raw products and rough industries in the Indian Economic Court afforded especial ground for satisfaction to all persons interested in the welfare of the Empire. It was an especially interesting feature of the occasion that a very large number of native ladies visited the Exhibition.

In return for the advances, amounting to Rs. 50,000, made by the Government of Bengal to other Local Governments in India for the purchase of exhibits, the Government of Bengal was permitted to select articles from the collections sent from the various provinces to the value of its advances. The selection made, together with the collection of exhibits purchased in these provinces from the sum of Rs. 10,000 placed in the hands of the Executive Committee, forms the nucleus of the Art portion of the Economic and Art Museum established in the new building which adjoins the Imperial Museum, and which, extended and enlarged as funds become available, will be a permanent memorial of the Calcutta Exhibition of 1883-84.

INTERNAL AND FRONTIER TRADE.

The system of registering the internal trade of the province does not profess to embrace exhaustively the whole of the commercial dealings that take place within the Lieutenant-Governorship of Bengal. The paucity of large towns and trading centres renders it a work of great difficulty to include within the scope of any system all the scattered transactions that go to swell the sum total of the trade of the Province; and without a vast and incommensurate expenditure it would be impossible to do more than register the traffic along the more important routes. The Bengal system provides for the registration of all articles imported into or exported from the town and port of Calcutta, either by rail, or by sea, river, road, or canal. The trade of the rising ports of Chittagong

and Náráinganj, which are at present unconnected with the railway system of the Province, is registered in the same way, and also that of the three ports of Orissa, Balasor, Purí, and Chándbáli (including False Point). In addition to this, registering stations have been established at which all traffic is recorded which passes along the Nádiyá rivers, including the Bhágíráthí, the Jalangí, and the Mátábhángá, the Meghna river in Eastern Bengal, the Midnapur and Hijili canals, and the Orissa canals. Arrangements have also been made for registering the traffic carried by the inland steamer services and by country boats along the Upper Meghna and Brahmáputra rivers. It will be seen that the general scheme of traffic registration in Bengal omits two classes of operations, viz. traffic from district to district within the province, and road-borne traffic passing to large trade centres other than Calcutta. The latter class, it is believed, is not very extensive. The aggregate value of the former class must be considerable, but it is impossible to intercept it completely except at a prohibitive cost. From the year 1883-84 the system of registering rail-borne traffic was altered, so as to be assimilated to that prevailing in the rest of India, and arrangements were also made to publish the statistics of this trade every quarter. A Statistical Conference was convened in Calcutta in December 1883, at which it was suggested that for the purpose of supplementing the statistics of the inter-provincial rail-borne trade there should be small movable establishments for the purpose of periodically registering traffic on the main roads. Accordingly orders were issued for the registration of the road traffic between the North-Western Provinces and Bengal at the Karmnásá bridge uniting the districts of Benares and Sháhábád, which was begun from December 1884, and also for registration of the inter-provincial river traffic along the Ganges and the Gogra, which was begun from the following August. The Karmnásá registration was continued till October 1886, when sufficient information having been collected, the station was abolished and its staff transferred to Sherghátí in the Gayá district, in order to obtain traffic data with regard to a proposed railway extension. The registration at Ballia on the Ganges was discontinued from August 1886, but the Gogra-borne traffic, which is much larger than that on the Ganges, will continue to be registered at Maniár till the end of March 1887, for the observation of the effect which the development of traffic on the Bengal and North-Western Railway may have on that trade.

For the Calcutta trade a complete registration cordon has been drawn round the city, consisting of 25 posts, in order to intercept the whole of the traffic as it enters or leaves the town. The information for the Calcutta sea-borne trade, which need not be reviewed in these pages, is recorded in all its details by the Collector of Customs. The object of the internal trade registration is to take up the work as regards imports where the Collector of Customs necessarily stops, and to show how the imports into Calcutta by sea are distributed over the country; and, as regards exports, to work up to the point at which the trade comes under the Collector's supervision, and to show from what parts of India the goods that were exported came. The registration at the minor ports of the Province is confined to sea-borne trade except at Chittagong, where inland boat traffic is also registered. That on the Nadiyá rivers and on the canals is registered at the different toll-stations by the toll establishments. The boat traffic on the Brahmáputra and Meghna rivers, which crosses from Bengal into Assam and *vice versâ*, is registered at Bhairab Bazár and Dhubrí under arrangements made by the Assam Administration. Statistics of this traffic were first incorporated in the Trade Report of these Provinces for 1884-85. The figures regarding goods carried by the inland steamers on the

Ganges, Brahmáputra, and Meghna rivers are compiled from the statistics of the various Navigation Companies, which have been courteously placed at the disposal of Government by their respective Agents.

For the purposes of registration of rail-borne trade the Province has been divided into the following blocks:—(I) Behar, (II) Bengal, (V) Calcutta, (VI) Dacca, and (VII) Chutiá Nágpur. The returns show (1) the rail-borne trade between the Lower Provinces and certain blocks which are situated outside Bengal, such as the North-Western Provinces and Oudh, the Panjáb, and so on; (2) the rail-borne trade of every trade block of these Provinces with each block outside Bengal; and (3) the rail-borne trade of each block in Bengal with every other block in Bengal. The local traffic carried on between two or more stations of the same internal block is omitted.

The internal trade of these Provinces is of too multifarious a character to be dealt with in detail in the present place. It will be sufficient to give the following figures regarding total value of imports into and exports from Calcutta:—

Imports by—	1882-83	1883-84	1884-85	1885-86
	Rs	Rs	Rs	Rs.
East Indian Railway ..	25,32,74,000	26,14,10,000	38,53,09,000	39.44,34,000
Eastern Bengal Railway ...	6,35,93,000	5,20,17,000	5,40,79,000	5,64,66,000
Calcutta and South-Eastern Railway ..	9,03,000			
Inland steamers	3,97,13,000	4,08,85,000	4,68,08,000	4,74,22,000
Country boats	9,77,69,000	11,83,33,000	10,12,98,000	10,21,56,000
Road	3,96,23,000	5,78,35,000	4,60,04,000	3,46,45,000
Total ..	49,48,75,000	53,04,81,000	63,34,98,000	63,51,23,000

Exports by—	1882-83	1883-84	1884-85.	1885-86
	Rs	Rs	Rs.	Rs.
East Indian Railway ..	15,78,70 000	17,25,13,000	14,56,95,000	14,48,13,000
Eastern Bengal Railway	4,20,48,000	4,50,28,000	4,69,23,000	4,22,01,000
Calcutta and South-Eastern Railway	1,45,000			
Inland steamers	1,77,53,000	1,94,88,000	1,96,87,000	1,95,93,000
Country boats . . .	3,51,91,000	3,92,66,000	3,43,05,000	4,05,97,000
Roads	1,72,93,000	2,16,28,000	1,58,23,000	1,58,24,000
Total	27,03,03,000	29,79,32,000	26,24,33,000	26,30,27,000

The steady increase in the imports is an important fact; so also the rise of the exports to their highest point in 1883-84, which was also the year of the greatest sea-borne trade of the Province, and their subsequent decline, are significant facts.

Thirty-three stations are kept up for the registration of traffic passing between Bengal and the independent States lying along the Himalayas. These do not intercept the whole of the traffic which passes across the frontier, but it is believed that they suffice to register the more important portions of it. The total value of the trade with Nepal, Sikkim, and Bhutan was in 1885-86 rather more than 159 lákhs of rupees, the bulk of it being with Nepal. The trade with Sikkim however is increasing, and the use of cotton fabrics is

becoming popular in Thibet, where trade of all kinds would develope much more rapidly but for the restraints imposed by the Thibetan authorities.

VITAL STATISTICS.

Births were registered during the five years 1882 to 1886 in 45 principal towns in Bengal, with a total population of 1,650,855 souls. Birth registration in the town of Bálí commenced from 1884, and that of Cuttack from 1883. In all these municipalities the Compulsory Registration Act IV (B.C.) of 1873 is in operation. Under this law registration is carried on under arrangements made by the Commissioners of the municipalities, the police under the recent orders of Government having been relieved of the duty. In some municipalities special establishments have been engaged for the purpose of testing the accuracy of the registration and of reporting evasions of the law, and in others this work is performed by one or more members of the regular municipal staff. From the subjoined table it will be seen that there are great divergencies between the birth-rates in different towns, and that the mean birth-rates fluctuated between 21 and 25 per 1,000 of population—proportions considerably below even an approximately correct rate, which in Bengal may be assumed at 35 per 1,000.

Mortuary statistics were collected and recorded during the years 1882 to 1886 in the whole of Bengal excepting the feudatory States. The area under registration comprises 45 districts, divided for the easier collection and record of the statistics into (excluding a number of outposts) 652 main registering circles, of which 96 represent urban and 556 rural tracts. In these circles the village chaukídár collects the statistics, and in his weekly, and in some cases fortnightly, visits to the police-station in the jurisdiction of which his villages are situated, reports the event to a constable qualified to record the information. As a rule, these reports are made *vivâ voce* and from memory; but in some districts the chaukídár is furnished with memorandum books, called *háth-chithis*, in which the required particulars are entered by some person in the village who can read and write.

The local officers—magisterial and police—inquire into the occurrence of deaths in the villages visited by them during their tours of inspection and test the chaukídárs' reports by comparison of the information thus gathered with the entries recorded in the thánâ register.

It cannot be pretended that these checks, or the active superintendence of the Sanitary Commissioner, have in all cases resulted in accurate statistics, but it is satisfactory to find that the record of deaths has steadily improved from 4·0 per 1,000 of population in 1871, in which year the scheme was first brought into full operation, to 16·4 per 1,000 in 1876, the year which marks the boundary line between radically defective registration and the approach towards an approximately correct record. From this rate the record rose progressively to 22 per 1,000 during the past year (1886) —*vide* figures in the margin. After careful inquiry and discussion it has been shown in the Census Report of 1881 that 31 per 1,000 of population is about the true average death-rate in Bengal, and it will be seen how far below this rate is the rate at which deaths are even now registered.

Years	Deaths.	Ratio per mille.	Years	Deaths	Ratio per mille
1871	241,531	4·00	1879	950,842	15 85
1872	347,243	5·81	1880	922,633	15 40
1873	462,779	7 75	1881	1,255,478	18 99
1874	504,980	8 42	1882	1,349,551	20 41
1875	980,194	16 01	1883	1,245,676	18 82
1876	983,400	16·40	1884	1,378,610	20 83
1877	1,077,891	17 90	1885	1,504,745	22 74
1878	1,064,176	17 75	1886	1,455,305	21 99

Births.

Districts.	Number.	Municipalities and towns.	Ratio of births per 1,000 of population.				
			1882.	1883	1884.	1885	1886.
Bardwán	1	Bardwán	27 58	28 84	15 77	27 46	22 39
Bánkurá	2	Bánkurá ..	31 47	34·93	33 55	28 37	21 87
	3	Bishunpur .	21 00	21·25	27 76	26 08	22 74
Midnapur	4	Midnapur	12·06	15 43	21 33	18 20	15 40
Húgli	5	Hugli and Chinsurah .	22 49	20 71	22 82	21 90	21 77
	6	Serampur	30 26	26 70	31 02	28 30	26·98
	7	Uttarpárá .	19 05	20·08	25·04	20·87	21·96
Howrah	8	Howrah ...	17 63	18 47	27 05	23 49	21 49
	9	Báli ..			22 40	22 66	16 13
24-Parganás	10	Suburbs of Calcutta	19 04	19 88	23 27	20 81	19 30
	11	Basirhát	33 30	27 38	27 02	15 69	7 92
Nadiyá	12	Krishnagar . .	9 88	17 43	22 38	18 05	19 79
	13	Santipur	24 24	19 40	19 60	11 06	11 92
	14	Ránághát	12 07	13 24	17 62	7 94	5 52
Jessor .. .	15	Jessor . .	10 00	9 65	11 06	14 47	5 88
Rajsháhi	16	Beauleah ..	16 67	11 31	13 69	22 33	27 38
Dárjiling	17	Dárjiling ..	8 54	6 40	8 27	9 02	8 02
Dacca .	18	Dacca ...	21 00	20 57	19 58	17 00	16 26
Faridpur .	19	Faridpur ..	18 41	10 32	13 73	8 18	8 67
Maimansingh	20	Jamálpur .	40 64	31 24	34 49	29 33	24 42
Chittagong	21	Chittagong	20·51	21 91	20 56	25 44	23 49
Tipperah	22	Comillah	31 76	28 28	25 61	29 54	28 35
	23	Brahmanbaria	35 11	33 46	37 45	37 84	32 94
Patná	24	Patná	20 40	20 90	20 73	32 93	21 60
	25	Bihár	32 75	34 42	26 73	20 01	19 54
	26	Bárh	9 82	15 37	7 19	19 48	16 94
Gayá	27	Gayá ..	31 78	29 31	29 41	34 11	29 70
Shahábád	28	Arrah	19 74	28 55	16 63	16 74	4 46
Muzaffarpur	29	Muzaffarpur	15 25	15 11	19 05	23 09	19 34
	30	Sitámarhi .	37 22	31 34	24 31	31 14	30 20
Darbhangá	31	Darbhangá	17 36	24 32	29 57	32 42	28 16
Sáran	32	Chapra	18 87	23 98	18 42	22 19	12 75
	33	Revilganj	29 03	37 30	32 41	37 30	33 05
Champáran	34	Betiá	29 11	30 47	35 17	38 28	30 74
Monghyr	35	Monghyr	33 50	16 91	22 04	24 33	20 64
	36	Jamálpur .	48 79	49 17	49 30	53 23	43 72
	37	Shekpurá	22 60	21 01	23 40	30 03	25 24
Bhágalpur	38	Bhágalpur	37 87	33 64	33 88	40 41	30 54
Purniah	39	Purniah	14 91	11 32	17 51	20 37	15 51
Cuttack	40	Cuttack .. .		9 34	14 91	18 28	18 87
	41	Kendrapárá	32 55	25 54	46 91	34 97	27 64
	42	Jájpur	21 27	12 28	7·26	13 62	10 14
Puri	43	Puri	16 42	17 74	17 59	15 00	12 13
Lohardagá .	44	Ránchi	16 97	11 98	9 10	16 48	14 74
Mánbhum	45	Purúliá	23 86	12 24	26 87	21 92	19 45
		Grand Total	22 19	22 08	23 51	24 71	21 04

Number	Districts	Cholera.					Small-pox.					Fevers.				
		1882.	1883	1884.	1885.	1886.	1882.	1883	1884	1885	1886	1882	1883	1884.	1885.	1886.
1	Bardwán	3·79	1 25	1 64	3·86	·88	·009	07	·13	15	·005	28 86	23 35	19 81	17·78	15·69
2	Bánkurá ..	1 87	·44	1 12	1·72	·46	·06	01	01	02	02	26 40	16 71	13 56	12·35	12·63
3	Birbhúm . ..	3 20	·37	1 46	6 87	·74	01	01	·04	01	008	27 62	22 27	19·53	16·25	14·63
4	Midnapor .	1 37	1 49	1 54	1 43	1 84	27	05	07	05	007	15 73	15 31	14 79	14 58	14 59
5	Hugli	97	1 11	96	1 97	1 04	009	009	08	·03	·0001	19 03	16 43	15 18	17 38	15 12
6	Serampur	2 35	1 73	2 09	1 22	2 01	008	01	12	01	008	12 29	10 42	11 85	12 64	11·54
7	Howrah	2 21	3 00	2 39	2 16	2 20	01	01	·07	09	·004	7 29	8 42	8 39	10·01	6·96
8	24-Parganás .	3 54	3 47	3 57	3 07	3 63	03	07	·18	06	006	15 63	14 70	14 16	14·25	12 91
9	Nadyá	5 40	4 09	5 79	4 25	4 26	·007	·04	17	01	006	30 18	27 60	29 22	26 65	21 26
10	Jessor ..	6·05	2 21	3 38	2 69	4·06	003	001	·01	007	002	21 61	23 14	23·41	21 44	18 03
11	Murshidábád	2 92	96	4 99	2 04	1 41	07	27	04	02	01	20 01	21 79	20 25	19 56	18 33
12	Khúlná	3 05	1 58	2 64	2·00	1 59	004	01	01	0009	·003	18 65	17 53	18 52	18 15	17 56
13	Dinájpur	·14	·42	31	1 92	·41	·009	001	03	005	03	51 61	17 17	16 14	17 88	23 02
14	Rájsháhi	2 08	1 55	4 95	5 78	78	0007	008	04	03	01	24 24	30 12	30 40	24 03	24·66
15	Rangpur	84	1 01	55	58	2 92	001	0004	003	001	006	11 49	15 08	17 09	22 73	27·12
16	Bogra	1 98	38	1 90	4 21	1 31	001		02	01		19 72	19 91	20 96	21 21	22 21
17	Pabná .	3 90	18	3 36	1 98	2 46	008	004	01	0007	001	17 97	22 43	27 45	25 63	27 68
18	Dárjiling	35	2 12	17	19	1 47	03	39		006	15	4 91	5 88	8 46	11 14	16 35
19	Jalpáiguri	·05	4 17	37	45	2 98	01	·02		001	006	13 99	18 40	18 25	33 71	31 01
20	Dacca	2 99	1 03	3 87	1 52	3 01	07	04	19	22	02	12 82	13 90	15 37	12 86	14 24
21	Faridpur .	3 08	1 27	5 34	2 15	4 53	23	03	04	007	01	8 57	10 10	11 81	11 69	11 72
22	Bákarganj ..	4 05	2 40	4 63	2 09	1 59	31	23	09	10	·07	16 83	14 57	15 46	14 37	16 70
23	Maimansingh	1 96	1 26	2 08	1 75	2 34	21	·21	05	06	03	5 41	8 23	8 08	10 06	12 43
24	Chittagong .. .	2 42	29	1 09	1 58	01	1 06	007	001	0008	·0008	19 05	10 10	10 37	13 39	11 19
25	Noákhálí	32	·10	1 67	1 43	42	79	34	70	07	009	14 28	13 81	15 81	16 42	16 79
26	Tipporah ...	1 75	1 60	2 00	1 77	2 15	58	37	13	04	007	9 86	9 60	10 87	12 23	12 16
27	Patná ...	2 89	1 28	2 02	1 03	1 82	14	·18	1 00	41	03	17 71	12 97	14 73	16 47	15 01
28	Gayá	2 35	3 73	95	1 99	2 22	07	25	1 54	38	11	14 67	14 33	20 81	20 71	19 07
29	Sháhábád .	1 85	3 24	90	2 24	3 12	01	02	20	33	08	12 92	12 66	12 98	19·72	29 20
30	Muzaffarpur ...	4 68	1 32	·12	4 82	82	21	07	09	11	07	9 91	8 54	8 79	10 94	9 12
31	Darbhangá ..	4 14	1 05	28	2 78	·70	25	·08	11	11	06	9 93	10 00	8 44	12 20	10 16
32	Sáran .. .	1 54	45	58	1 09	·88	07	25	1 27	12	05	5 18	5 90	9 05	8 21	8 36
33	Champáran ...	3 11	30	37	3 90	·55	37	38	1 00	1 19	74	7·02	78	12 84	13 68	14 93
34	Monghyr	2 71	44	70	3 06	·93	30	13	·99	33	10	10·52	8 80	13 41	25 65	24 07
35	Bhágalpur .. .	3 92	25	81	3 41	54	·44	10	56	14	01	13 20	11 28	16 34	23 13	21 06
36	Purniah .. .	4 79	18	22	1 57	1 34	01	01	02	01	01	16·34	16 41	16 00	19·22	18·61
37	Maldah	1 59	1 47	1 62	6 17	·18	11	02	01	01	002	18 22	15 73	15 84	17 95	14 96
38	Santál Parganás . .	7·13	23	1 73	3 80	16	03	05	16	09	05	8 91	10 95	12 25	13 22	11 37
39	Cuttack . .	4·19	1 95	4 16	5 74	3·97	1 02	87	56	46	16	7 17	7 13	8 89	8 01	8 70
40	Puri	4 25	1 26	3 52	5 98	4 29	1 02	94	·27	23	10	5·71	5 00	2 93	2·24	3 79
41	Balasor ..	6 21	2 12	7·79	3 71	4 46	84	·62	22	24	·40	7 90	7 85	8 41	7·27	10·78
42	Hazáribágh . ..	·13	·65	1 16	3 35	08	·10	15	85	13	009	12 83	13 73	16 46	16 52	16 35
4	Lohárdagá	00	33	·11	·47	·07	27	01	00	21	01	13 55	12·58	11 84	11·70	12·84
44	Singhbhum	11	06	·19	·70	02	29	37	·03	·001	001	10 67	9 96	11·23	9·89	10 25
45	Mánbhúm	1 24	·29	1 74	1 66	·18	·09	04	·02	·01	002	11 38	9 70	10 18	9·19	11·34
	Total for the Province	2 75	1·38	2·03	2 62	1 78	·20	·14	28	·14	26	14 06	13 81	14 60	15·75	13·97

Deaths.

Bowel-complaints.					Injury					Other causes.					Total of all causes.				
1882.	1883.	1884	1885.	1886	1882.	1883.	1884	1885	1886.	1882	1883	1884.	1885	1886.	1882.	1883	1884	1885	1886.
·64	52	·45	·55	·44	20	21	23	24	·26	1 91	2 04	2 57	2 91	2 78	25 42	28 08	23 85	25 52	19 48
76	46	·54	66	·43	18	20	21	27	·27	2 92	2 43	2·80	3 18	3 07	32 21	20 27	18 27	18 18	16 90
·22	·14	·20	·30	13	22	·26	19	27	28	2 99	2 90	4 56	4 51	4 65	34 34	25 97	26 01	28 80	20 46
1·65	·67	1 56	1·60	1 48	·26	28	24	30	39	1 35	1 75	1 90	2 47	2 83	20 66	20 50	20·18	20 40	21·11
2 24	2 08	1 83	2 03	2·04	31	·30	·41	41	·49	1·61	1 55	1 85	2 26	2 38	24 78	21 49	20 83	24 72	21 10
2·44	1 96	2 46	3 55	2 81	·33	·38	31	44	38	2 14	2 37	2 86	3 43	3·96	19 59	16 87	19 70	21 30	20 73
3 26	3 85	4 01	4 85	3 49	55	49	·55	67	66	1 75	3 31	4 02	3 58	3 34	15 09	19 11	19 44	21 39	18 68
1 78	1 58	1 61	1 99	1 63	45	53	53	56	54	2 07	2 74	2 97	3 01	2 95	24 07	23 12	23 05	22 98	21 68
61	56	33	23	·37	54	52	60	65	·62	2 37	2 63	3 48	2 73	2 47	39 37	36 07	39 60	34 75	28 91
25	09	11	12	06	45	37	40	41	45	87	1 21	1 07	1 06	77	29 20	27 04	27 41	25 75	23 41
30	18	27	39	31	43	40	41	54	·57	1 04	1 05	99	1 02	1 07	30 80	24 67	26 98	24 20	22 32
24	22	·32	·26	·24	47	43	52	44	41	1 47	1 52	2 68	2 35	2 29	23 90	21 35	24 71	23 30	22 11
10	18	·12	26	22	25	·27	41	47	39	99	94	·58	72	87	17 18	10 01	17 62	21 28	25 89
·07	11	13	19	11	40	44	48	72	58	51	61	·50	40	65	27 92	32 86	36 49	31 18	27 01
15	23	18	22	18	22	21	20	28	28	77	98	81	1 44	1 70	13 49	18 14	18 86	25 57	32 22
11	09	14	19	07	37	46	44	65	53	1 84	1 42	1 49	1 42	1 89	24 04	21 63	24 97	27 72	20 02
25	22	31	39	25	31	33	31	44	45	90	1 32	·97	77	86	23 34	24 50	32 43	29 15	31 73
91	53	2 23	3 08	4 65	29	32	23	40	29	49	84	1 09	1 15	2 07	7 01	11 11	12 80	17 90	25 91
15	19	22	20	25	16	17	18	17	21	90	62	57	1 44	1 54	15 34	18 00	19 58	25 99	25 42
1 11	1 19	1 51	1 54	1 82	19	·24	20	29	·34	3 34	3 67	4 22	3 59	3 46	20 94	19 58	23 36	20 05	23 93
43	31	47	40	38	21	23	27	41	34	60	80	1 14	95	1 01	13 15	12 70	19 00	15 61	18 01
35	37	45	39	36	53	54	52	58	60	5 52	5 64	6 65	6 65	7 27	28 00	23 80	27 83	24 20	26 71
·22	24	34	49	72	15	·12	15	24	22	98	1 62	1 52	1 78	2 31	8 94	11 74	12 85	14 41	18 08
·53	43	51	83	40	46	54	47	50	60	3 50	2 88	3 60	2 60	1 95	20 05	14 25	15 08	18 91	13 95
25	20	93	36	33	40	51	50	48	67	1 75	2 14	3 07	2 75	2 05	17 82	17 43	22 10	21 53	21 19
26	32	·53	54	52	25	27	32	37	37	1 02	2 00	2 71	2 84	2 06	14 10	14 18	16 67	17 91	17 87
2 70	2 20	2 34	2 49	2 08	45	50	40	55	56	5 37	4 94	4 62	4 84	4 33	29 28	21 95	25 19	25 85	22 87
46	48	42	49	58	40	49	53	54	60	1 51	1 84	2 52	2 13	2 94	19 40	21 14	26 70	25 07	25 53
49	44	31	35	·37	21	37	41	36	37	1 64	2 05	2 05	2 59	3 01	16 55	18 70	16 71	25 62	26 17
1 26	75	07	82	69	49	56	61	56	57	2 47	1 92	2 10	2 32	1·96	19 05	12 98	12 41	19 59	13·24
1 31	1 05	·95	1 30	92	35	39	·34	44	46	97	86	78	1 15	93	16 95	11 50	10 93	18 01	13 25
2 07	1 70	1 76	1 64	1 43	20	42	41	46	·47	5 67	6 58	8 81	9 54	8 83	14 85	15 31	21 91	21 99	20 04
26	24	19	23	18	37	43	·46	·51	58	2 75	2 73	3 79	4 21	3 68	13 90	14 98	18 17	22 83	20 68
29	26	32	53	41	27	·34	48	51	·60	54	44	70	2 17	3 31	14 66	9 09	16 02	32 26	28 89
·45	·91	1 16	90	76	27	·30	36	34	40	1 10	1 67	2 41	3 02	3 81	19 40	17 74	21 64	31·04	26 02
·12	26	1 11	17	11	20	·19	19	19	21	17	50	43	52	42	21 06	17 58	17 04	21 71	20 75
·05	06	03	06	03	25	29	25	31	31	08	48	57	75	60	20 86	18 07	18 46	25 28	15 51
23	·13	·25	30	54	09	14	15	22	26	64	102	96	1 17	1 25	13 45	12 52	15 53	18 41	13 65
1 83	1 77	2 25	2 34	48	48	50	50	95	1 91	4 60	4 27	5 14	5 03	4·34	19 32	16 51	21 52	21 18	19 59
2 52	2 58	3 02	2 93	2 05	44	39	47	46	47	7 61	10 09	12 84	11 36	12 04	21 60	20 28	23 09	23 23	23 28
6·20	5 28	5 21	5 00	4 68	·45	14	41	18	40	5 58	5 50	6 02	5 53	5 26	27 27	21 93	28 08	32 31	26 08
·86	8	·97	90	57	·26	30	44	46	48	70	1 30	1 31	1 38	1 53	14 60	17 10	21 21	21 71	19 04
1·72	1 41	1 31	1 25	1 08	27	25	26	32	27	2 20	1 98	1 80	1 99	2 42	18 11	16 59	14 93	15 96	16 86
1 75	·39	1 78	1 35	1 10	39	40	42	47	46	1 87	1 97	2 19	2 29	2 63	15 31	14 16	15 93	14 33	14 48
1 24	70	1 05	·98	69	·17	18	21	20	27	2 16	1 93	2 21	2 11	2 42	16 93	12 86	15 40	14 11	14 88
·92	83	88	·96	80	·32	35	37	·43	47	2 12	2 30	2 66	2 91	2 88	20 41	18 82	20 83	22 74	21 99

SANITATION.

With the general extension of Local Self-Government, whether in Municipalities or in District Boards, there can be no doubt that the important question of sanitary reform will every year demand a closer attention at the hands of Government. In the first place public opinion is beginning to force the question into prominence, and as municipal institutions develop in the interior, the best possible agency will be available for the enforcement of sanitary regulations and the extension of all those improvements for the purer supply of water and other benefits tending to promote the health of the people.

It must suffice to briefly enumerate here the chief sanitary measures in this direction undertaken during the past five years.

The scheme for supplying the town of Bardwán with filtered water from the Damudá was undertaken in 1882. The water-works were opened and the supply of water was commenced in 1884. The measure has conferred a great boon upon the inhabitants. In 1882, at Pabná, the river Ichchhámatí was embanked, and a large supply of fairly good drinking-water was retained by this means. In the same year the city of Murshidábád drainage scheme was almost completed, and so was one portion of the Gayá drainage scheme. A good deal of work was also done during this year for the fever-stricken district of Nadiyá, by which many obstructions to drainage were removed and large tracts of country benefited. In the district of Murshidábád a cut was made to drain the Kálíganj bhíl, and two existing cuts for draining the town of Berhampur and the lowlands and bhíls between it and the Gobrá nalá were thoroughly cleaned and repaired.

In 1883 in Murshidábád, as supplemental to its larger drainage scheme, the construction of a system of subsidiary drains was commenced The drainage works in Ázimganj in the same district were undertaken, and were completed in the following year. In the town of Berhampur a channel with a sluice was constructed through Gorábazár and its neighbourhood, leading into the Chaltiá bhíl. The Gorá bazár ward was thus drained of surface water, and several tanks were flushed with water from the Bhágírathí, thus receiving a fresh supply of water for the people.

In 1884 a general inquiry, extending over the whole of Bengal, was instituted for the discovery of localities where the very reprehensible practices of intramural and intra-village interments, and the throwing of corpses into the rivers, &c., obtained. The result was that both practices were found to be very generally prevalent, and so far as executive orders can exercise control, they were checked. Another inquiry was held in the same year as to the condition of the water-supply at the chief stations on the Eastern Bengal State Railway line in Nadiyá. It was ascertained that it was bad almost along the whole length of the line, and arrangements were made to remedy the evil. Mr. Finlay, the Manager of the Wellington Jute Mills in the Húglí town, constructed in the same year a large cistern capable of containing 70,000 gallons of water from the river of comparatively pure quality. The Dacca water-works were considerably extended in that town. The scheme for improving the drainage of the Dinájpur town in connection with the general

drainage project suggested by the Sanitary Commission of 1878 was sanctioned by the Government in 1886, and is to be commenced shortly. The entire cost, amounting to over Rs. 26,000, will be met by the Mahárájá of Dinájpur.

In 1885 a general inquiry was instituted throughout Bengal as to whether the practice of steeping jute in tanks and water-courses proved a harmful source of pollution of water. The investigation showed that generally the people avoided the use of such water for drinking or culinary purposes. Sanction was accorded by Government in this year to the enforcement of proper sanitary precautions at places where cultivators assemble for opium weighments. Preliminary arrangements were made for an artificial supply of good drinking water in the portion of the city of Murshidábád at a distance from the river, where the want of water is much felt. The water-works project of Bhágalpur was taken in hand, and has since been completed. It will be dealt with at greater length under the head of Public Works. In the town of Purí an experimental water-supply scheme was considered. It aims at providing water from wells and a settling tank. Iron pipes leading to the town will convey the supply for distribution. The difficulty arises from the want of municipal funds to give effect to the project. The temple funds should contribute to this object. In the Bardwán district Sir Rivers Thompson granted Rs. 5,000 for the improvement of the water-supply of the tracts where distress caused by failure of crops prevailed, and Rs. 3,000 were advanced under the Land Improvement Act to landholders and superior tenants for cleansing out and deepening old and silted-up tanks and excavating new ones. Drainage works for the Beauleah town in Rájsháhí were commenced and carried out with great activity, and arrangements were made for carrying out a proper drainage scheme in the Muzaffarpur town, where it is much required. Commendable efforts were made in the Government estates in the Sasseram subdivision and in the Government town of Násriganj, both in Shánábád district, for the improvement of their drainage, water-supply, and conservancy arrangements. These efforts were directed towards constructing drains along the sides of the lanes to regulate the drainage, using the earth excavated in levelling the roads between the drains; cleansing foul spots and converting them into roads or open spaces; filling up objectionable holes and converting large excavations into tanks; sinking wells; and employing sweepers to proceed from village to village and remove refuse.

In 1886 the Sarpái drainage scheme was finished, as described under the head of Irrigation In the town of Howrah it has been decided to remove by tramway all the night-soil and sewage matters from its southern portion to trenches outside municipal limits. The scheme is to be extended to the north of the town when funds become available.

The above are only a few of the sanitary improvements carried out during the period under review. The furtherance of such reforms must depend very much upon the extent to which local bodies will co-operate with Government in the promotion of the object. A Sanitary Department, however efficient, can in the absence of legislative powers do little but offer suggestion and advice; and it had been the Lieutenant-Governor's intention, as soon as the agencies under Local Self-Government had become established in the country, to have recourse to legislation on the subject.

VACCINATION.

The progress of vaccination has been marked during these five years. In 1882-83 the action of the Government vaccinators was extended to six new areas amounting to over 9,000 square miles with a total population of more than 4½ millions. In the following year five new areas aggregating over 6,000 square miles, with a population of about 3,800,000, were newly brought under protection. In 1884-85, in addition to the areas protected in former years, the whole of the districts of Tipperah and Pabná, and parts of the districts of Mánbhúm, Lohárdagá, and Cuttack, were brought under the operations of the Department.

The Compulsory Vaccination Act has also been gradually extended. In 188-283 it was introduced into six municipalities, making a total of 14 towns in all. In the following year no less than fifty-six towns, including all the municipalities in the Bardwán and Presidency Divisions, and four thánás, were added to the list. At the end of 1884-85 the Act was in force in 81 towns, 4 cantonments, and 9 rural areas, the numbers being increased by the addition of 16 towns and five thánás. In the following year four new towns were added. The opposition to compulsory vaccination is gradually dying out. The Musalmáns, Rájpúts, and Márwárís have always resisted it, but the benefits of vaccination are so continually proved by experience that the system must in the end make way among them as it has done among other classes of natives; and it is encouraging to observe that lately many of its most powerful opponents have accepted it. In the year 1883-84 in Gayá, to which town the Act had been extended in the previous year, obstinate resistance was made by the wealthy class of Hindús and by priests of the old town. Six hundred persons were prosecuted there for resistance, but with the exception of 36, who were sentenced to small fines, they were discharged with a warning. Even there the public feeling is now said to be growing in favour of the measure, and the objections, based on religious grounds, are giving way gradually before the conviction of the benefits of the prophylactic. The protection afforded by vaccination may be gauged from the fact that in 1883-84, while the mortality from small-pox in the areas unprotected amounted to ·25 per mille, in the thoroughly protected areas it was only ·07 per mille.

The following is the total number of successful vaccinations performed, and the cost thereof, during the four years for which figures are available :—

Year.	Number of successful operations.	Total cost.
		Rs.
1882-83	1,261,000	1,16,000
1883-84	1,361,000	1,31,000
1884-85	1,488,000	1,51,000
1885-86	1,869,000	1,67,000

The total number of persons who had been protected amounted at the end of 1881-82 to 13,754,000, and at the end of 1885-86 to 19,105,158. The decrease in the number of successful operations in 1885-86 was attributed partly to the paucity of unprotected subjects in the areas in which Government agency was employed, and partly to the inefficient manner in which the work was carried on by municipal agency.

In 1882-83 a depôt was established in Calcutta for carrying on a system of bovine vaccination, which was imported from Bombay. The use of bovine lymph greatly increased in the following year, as it was found to possess several advantages over humanised lymph. Although, owing to its being almost inevitably mixed with serum, it quickly deteriorates, a plentiful supply is always ready to meet any sudden demand, and the percentage of success in operations is decidedly higher. As soon as the difficulties at present experienced in successfully storing it in tubes are overcome, the failures which now and then occur from its use will diminish in number.

In April 1886 an Act to amend the Bengal Vaccination Act was passed. Its object was to extend the benefit of the original Act to immigrants and temporary sojourners, to enable notices to be served on parents requiring them to have their children vaccinated, to authorise the Health Officer to require any unprotected person on any vessel arriving in the Port of Calcutta with small-pox on board to be vaccinated, and to invest the Health Officer with larger powers of supervision and control.

MEDICAL RELIEF.

In dealing with the question of medical relief, it would be impossible to give a satisfactory notice of its history during the period under review within the limits of the present paper. It must suffice to notice a few of the more salient points.

In Calcutta the Edon Obstetric Hospital, which was opened in July 1882, has been largely made use of by the public, and has evidently supplied a general want. In 1883 the increase in deaths from small-pox drew the attention of Government to the want of proper accommodation in the hospitals for Europeans suffering from that disease, and the Shambhu Náth barrack in the compound of the General Hospital was converted into a ward for paying patients suffering from small-pox, while alterations were made in the small-pox ward of the Sealdah Hospital so as to make it suitable for the poorer class of patients. During the period under review the system of nursing established at the Medical College and General Hospitals under the superintendence of the ladies of the Clewer Sisterhood has worked with signal success, and has received the highest commendation of the medical authorities. Sir Rivers Thompson has on more than one occasion added his testimony to the valuable services which this institution has rendered to the cause of medical charity in Calcutta. The following figures for the Calcutta hospitals during the first four years of the period under review will be of interest:—

Year.	Number of in-patients	Number of out-patients	Hospital death-rate per mille	Total expenditure	Net cost to Government
				Rs.	Rs
1882	20,600	232,500	143 73	3,69,000	2,32,000
1883	20,400	239,300	136 83	4,05,000	2,62,000
1884	21,400	235,700	146·7	4,13,000	2,70,000
1885	23,900	239,800	125 79	4,23,000	2,71,000

The reforms which had been inaugurated in the constitution and management of charitable dispensaries in the interior, and which had made excellent progress during the two previous years, were suspended during 1882 in consequence of the various changes which it was anticipated the then projected scheme of Local Self-Government would involve in the status of those institutions. Progress was nevertheless made intransferring the management of these institutions to local bodies and private committees, and this principle was extended more widely in the following year. At the same time new dispensaries were opened, and some which had been closed were reopened. The old system, under which Government guaranteed an appointment as Assistant Surgeon to every student passing the Licentiate examination, was found to cause an accumulation of unemployed Assistant Surgeons, and this was brought to an end. For the purpose of adjusting the pay of medical officers at subdivisions, all subdivisions were graded in seven classes, according to the work in each, and arrangements made for posting to them medical officers from the grade of Surgeon for the highest class to that of Assistant Surgeon for the intermediate, and of Hospital Assistant for the lowest class of subdivisions. The managers of dispensaries are allowed to utilise the services of the subdivisional medical officers on payment of the dispensary allowance, or to secure the services of an officer of a higher grade on making up the difference of the grade pay and allowances. In 1884 no Assistant Surgeon was admitted to the service; 21, however, were received by transfer from the Imperial list. An important concession was granted in the same year to supernumerary Assistant Surgeons, who were now allowed to count supernumerary service towards leave and pension. This was the greater boon as it was found that in some cases local bodies declined to pay the higher salaries due to their medical officers on passing departmental examinations, and the officers were thus reduced to the supernumerary list. In 1885, 24 Assistant Surgeons were received by transfer, and 18 Civil Hospital Assistants were admitted into the service. Another concession was proposed in this year. Sir Rivers Thompson pointed out to the Government of India that the limit of age for the entrance of Assistant Surgeons into the service of Government should be raised. So long as the limit remained at 25 years, it pressed hard on many of the best students, especially those who commenced the study of medicine after taking the degree of Bachelor of Arts. This concession was granted in 1886, the Government of India having ordered that the limit of age for the entry of Assistant Surgeons into the service of Government in Bengal should be raised to 28 years.

The following figures refer to hospitals in the interior :—

Year.	Number of dispensaries.	Out-patients	In-patients.	Hospital death-rate per mille.	Total expenditure	Net cost to Government.
					Rs.	Rs.
1882	223	23,500	934,200	157·5	3,66,000	41,000
1883	230	22,500	915,800	141·3	3,78,000	40,000
1884	280	25,000	965,600	147·5	3,62,000	19,000
1885	233	25,800	960,200	155·9	4,72,000	19,000

As more hospitals are taken over by municipalities, the cost to Government has diminished. Charitable dispensaries are not largely resorted to by the

people even in times of epidemic. The value of European medical science is, however, becoming more felt, and the increase of late years in the number of patients seems to show that by associating local bodies in their management the people are gradually being brought to place more confidence in them.

The operation of the Contagious Diseases' Act was restricted at the end of 1881 to the southern portion of the town of Calcutta and certain neighbouring parts of the suburbs. The exemption was followed by a considerable accession of disease, not only in the exempted, but even in the restricted area. While this matter was engaging the attention of the Local Government orders were received from the Government of India in 1883 for the total withdrawal of the Act as a temporary and experimental measure. Arrangements were, however, made for maintaining the lock-hospitals at Alípur and Sealdah as voluntary institutions. On the day the Act was abolished 141 out of 152 diseased women at those two hospitals demanded to be, and were, set free. It is to be feared that the increase in this disease in Calcutta has since been very large.

EDUCATION.

The following table shows in a compendious form the progress that has been made in education of different classes between the 31st March 1882 and the 31st March 1886. The figures for 1886-87 are not yet available:—

Class of Institutions.		31st March 1882		31st March 1886	
		Schools	Pupils	Schools.	Pupils.
Public Institutions—					
University	Colleges ...	22	2,745	26	2,998
Secondary	High schools .	217	45,597	264	57,623
	Middle schools ...	1,677	95,498	1,873	115,947
Primary	Upper primary	1 944	68 598	3,087	113,526
	Lower ,, ...	48,844	812,349	47,641	986,473
Special	Training and Technical schools	58	3,932	72	5,420
French	Girls' schools . ..	1,042	21,018	2,336	46,293
	Total of Public Institutions ..	53,804	1,049,727	55,299	1,328,280
Private Institutions—					
	Total of Indigenous Institutions ..	4,275	56,918	2,234	29,749
	Grand Total ...	58,079	1,106 645	57,533	1,358,029

Under colleges are included all institutions affiliated to the University in Arts; and like other classes of institutions they are divided into Government, aided, and unaided. Government colleges have risen from 12 to 13 by the opening of a small college class in 1883 in the Calcutta Madrassa, the institution founded by Warren Hastings in 1781 for the education of Musalmáns in Arabic literature and law. Aided colleges have increased from five to six, and the number has advanced during the current year to seven, by the granting of aid to the Victoria Narál College in the Jessor district. The number of unaided colleges has increased from five to seven through the opening of the Ripon College in Calcutta and the Jagannáth College at Dacca.

High schools pursue a course of studies beginning with the alphabet and ending with the matriculation examination of the University. English is taught in all high schools, and to all but a small proportion of the pupils, and English is also the medium of instruction, except in the lower classes of a few schools.

Under public management there were in 1882 51 Government schools; in 1886 there were 52 Government schools (an additional school having been opened at the head-quarter station of the new district of Khúlná), and four schools maintained by Municipal Boards. Aided schools increased in the same period from 104 to 137, and unaided schools from 62 to 71.

Middle schools teach to a standard equivalent to that of the third class in high schools. The vernacular is the medium of instruction throughout; in one section (middle English schools) English is taught as a language merely; in the other section (middle vernacular schools) no English is taught. Middle English schools increased from 627 to 732; middle vernacular schools from 1,050 to 1,141. The number of pupils reading English and the vernacular respectively in these schools in 1882 was 30,036 and 65,462; in 1886 they were 43,253 and 72,694. The number of Government schools of both classes (nearly all middle vernacular) fell from 196 to 191; 12 schools were taken under the management of Municipalities; aided schools rose from 1,270 to 1,418; and unaided schools from 214 to 252.

The total number of primary schools of both classes, upper and lower, decreased slightly from 50,788 to 50,728; but the number of their pupils advanced from 880,937 to 1,099,999. The increase would have been much greater but for the disappearance from the returns of the Department in 1885-86 of nearly 15,000 schools with 123,000 pupils. Schools of this class, whose numbers exhibited a rapid increase year by year, had in fact far outgrown the limits of efficient inspection. Accordingly, with a view to the consolidation and improvement of the better and more promising class of primary schools, it was decided to exclude from the departmental examinations, and subsequently from the annual returns, small, temporary, and backward schools; that is to say, those which had less than 10 pupils, those which had existed for less than six months, or those in which no printed books were read. The average number of pupils to a primary school has consequently risen, between 1882 and 1886, from 17 to 22. All these schools are under private management, being maintained "by the village for the village," with a small grant from Government awarded on the results of the annual examinations. The upper primary schools mark the highest point yet reached in primary education, and their number has advanced from 1,944 with 68,598 pupils to 3,087 with 113,526 pupils.

The number of schools and colleges of special instruction has increased from 58 to 72 by the addition of two law schools affiliated to the University, of three training schools for masters and mistresses, of two medical schools, and of seven industrial and other schools. The enlargement of the means of technical instruction has for some time been receiving the careful attention of Government.

Female education has made a rapid advance, the number of girls' schools and of pupils having more than doubled. In addition to the figures shown in the table, there are also some 35,000 girls reading in boys' schools.

It will have been noticed that the whole of the increase that has taken place in schools of different classes has been effected, not by the agency of Government, but by private enterprise assisted and encouraged by grants-in-aid. The grant-in-aid assignment for secondary and superior instruction

has been increased from Rs. 4,50,000 in 1882-83 to Rs. 5,41,000 in 1886-87. Similarly, the grant for primary village schools has been raised from Rs. 5,50,000 for the former period to Rs. 7,71,000 for the latter. The total budget grant for education has risen from Rs. 28,78,000 in 1882-83 to Rs. 33,92,000 in 1886-87, and the sanctioned net expenditure (after deducting receipts) from Rs. 23,48,000 at the former period to Rs. 28,36,000 at the latter. This increased expenditure has enabled the Government of Bengal not only to afford increased assistance to the managers of private institutions, but to improve the position of its own officers by a reconstruction of the subordinate graded service, and by raising the pay of the lowest class of sub-inspectors from Rs. 30 to Rs. 50 a month. The superior inspecting staff has also been strengthened by the appointment of Assistant Inspectors, so that there is now one of these officers to each division. Sir Rivers Thompson has cordially accepted the view of the Education Commission in favour of the increased employment of Native agency in the grade of Circle Inspectors, by appointing a second Native Inspector for Bengal.

The Government of Bengal has, in accordance with the recommendations of the Education Commission, taken steps to transfer the Berhampur and Midnapur colleges to private management; while it has at the same time recognised the claims of private enterprise by sanctioning a grant-in-aid to the college classes opened in connexion with St. Paul's School for Europeans at Dárjíling, and to the new second-grade college for Native students at Narál in Jessor. The colleges at Krishnagar and Rájsháhí have for the present been retained under Government management, in the absence of any local agency to which they could be transferred with adequate guarantees of permanence and efficiency. A special exception has been made in favour of the small and inexpensive college at Chittagong, on account of its distance and isolation.

The higher education of the women of Bengal has made good and even remarkable progress. The college classes attached to the Bethune Female School have now been established on a sure and stable basis, and their steady advance has been signalised by the attainment of the degree of B.A. by four young ladies, and of the M A. degree by the most distinguished pupil that the school has yet produced, Miss Chandra Mukhi Bose, who has now been appointed Lady Superintendent of the institution to which she owes her education. But perhaps the most important and beneficent measure that has marked the recent progress of female education is the admission of women in 1883 as regular students, on equal terms with men, to the licentiate and graduate classes of the Calcutta Medical College. Special female scholarships of the value of Rs. 20 a month, and tenable for five years in the Medical College, were at the same time created, without restriction as to number, for all female candidates who, within a period of ten years, might join the Medical College after passing the First Examination in Arts. Two years later, in 1885, a further step in the same direction was taken by the opening of a less advanced class. Under these orders it was ruled that girls passing the matriculation examination of the University should be admissible to a special class in the Medical College; and that after a three years' course of classes and practical instruction, and after passing the prescribed examinations, they should receive certificates qualifying them to practise midwifery, medicine, and surgery. The public voice has cordially recognised the utility of this measure. It may here also be mentioned that Her Highness the Maháráni Sarnamayi made to the Government in 1885

the munificent donation of Rs. 1,50,000 for the erection of a hostel intended to accommodate these classes of female medical students. The building has been completed, and is now occupied by seven or eight students under the care of an efficient lady superintendent.

Sir Rivers Thompson made a grant of a large and valuable piece of Government land for the construction of a Hindú hostel, the funds for which have been raised by private subscription. The land is in the immediate neighbourhood of the Presidency College and the Senate House, and its value has been greatly increased by the opening out of roads at the public expense. The plans of the building have been approved, and it is hoped it may be at once taken in hand and completed.

Schools for European children have also received liberal encouragement. The Draft Code of regulations for European schools in Bengal was accepted by the Government of India in 1883. Its introduction has been attended by a great and general improvement in the standard of education and in the efficiency of the schools; and Sir Rivers Thompson has fully recognised the obligation under which it placed him to make liberal grants to schools, especially for building purposes. The total expenditure on European education has risen from Rs. 1,13,696 in 1882-83 to Rs. 2,09,806 in 1884-85 and to Rs. 1,61,346 in 1885-86. The increased expenditure has chiefly arisen under the head of building grants, which amounted in 1884-85 to Rs. 94,933, and in 1885-86 to Rs. 35,000, besides a sum of Rs. 33,000, the expenditure of which was postponed to the following year. For the year 1886-87 a further grant of Rs 85,966 was sanctioned for the same purpose. An Assistant Inspector appointed in England has been added to the establishment.

The education of the Muhammadan community has received Sir Rivers Thompson's special attention. There has been a large increase in the number of Muhammadan pupils in all classes of institutions of the higher grade; and by way of affording greater facilities to the most deserving of these students, to enable them to pursue their studies for the University degree, forty special scholarships have been established for Muhammadans. Two scholarships have also been created to enable those who have taken the B.A. degree to proceed to the M.A. Nor have the requirements of the Muhammadans in the way of Oriental learning been neglected. The course of instruction in the Arabic department of the Madrassa has been investigated; and with the object of rendering the course more practically useful to those who follow it, English has been introduced as an optional subject, and attention has been directed towards the introduction of the Bengali language and of arithmetic. For the better supervision and encouragement of Muhammadan schools throughout the country proposals have been made for the appointment of two Muhammadan Assistant Inspectors; and provisional sanction has recently been accorded by the Government of India to these proposals, though their execution is for the moment delayed owing to financial difficulties.

In consequence of representations made by the National Muhammadan Association, and in accordance with a Resolution published by the Government of India in the Home Department, dated 15th July 1885, the Government of Bengal appointed, on the 8th December of the same year, a Committee to examine the question of the management and appropriation of Muhammadan

educational endowments. In constituting the Committee Sir Rivers Thompson, while gladly welcoming the proposal, issued, amongst others, the following instructions:—

"It is a fact that the progress of education among the Hindú community of Bengal is largely indebted to private liberality; and although among Muhammadans there are fewer wealthy persons than among Hindus, it is probable that the number of those who have devoted money to public purposes, according to their means, are not, comparatively speaking, fewer in one community than in the other. Educational endowments, when of small value, are apt to be overlooked; and when they consist of immoveable property they are apt to be diverted from the donor's intention. Much good may therefore result from a Committee appointed to inquire in the first place into the number of such educational endowments, their character, and the manner in which the proceeds are applied. It may be possible that, when information on these points is collected, administrative arrangements or legislative action may be devised, whereby, in accordance with the wishes of the representatives of the Muhammadan community, the funds of these endowments may be applied more carefully than at present, and more in accordance with the wishes and intentions of the donors

"When the facts regarding the extent and character of the endowments in question have been ascertained, the duty of the Committee will then be to consider how far they point to the necessity for action, executive or legislative, to provide that the endowment funds may be most usefully employed."

It was the first duty of the Committee to collect all available information as to existing endowments for the promotion of Muhammadan education. With this object they examined the records of the Bengal Office, the Board of Revenue, and the office of the Director of Public Instruction, and caused inquiries to be made through revenue officers and local committees in every district. The Secretary also visited on behalf of the Committee the chief Muhammadan centres—Bánkipur, Murshídábád, Dacca, Chittagong, and Húglí—where, in communication with those most interested in the subject, he aided in the formation of District Committees and in directing their investigations. Assistance was also received from the Muhammadan Association, and from individuals anxious to aid in promoting the cause of education. The Committee at length succeeded in drawing up a list of the Muhammadan endowments known to exist in connexion with educational institutions in Calcutta, and of those Muhammadan educational endowments in the interior which are at present maintained in working order. It has not as yet been found possible for the Committee to complete its inquiries or to communicate with the corresponding Committee in Madras, as suggested by the Government of India. Its final report is awaited.

LITERATURE AND THE PRESS.

The literary history of these Provinces for the last five years has been in some respects a sad one. Almost all the distinguished men who laboured for the last half century to create a Bangálí literature, and whose writings have given shape to the modern Bangálí language, have one by one passed away during the period under review. The oldest amongst these was the

Rev. Dr. K. M. Banerji, a scholar, linguist, and antiquarian, whose varied writings, whether in English or in Bangálí, will always be read with interest. To European readers he is best known through his "Dialogues on Hindú Philosophy." In Bábú Akshaya Kumár Datta, who shared with Pandit Iswar Chandra Vidyáságar the reputation of having given a form to Bangálí literary prose, this country has lost an earnest lover of research and an enthusiastic man of letters. His "Bháratbarshiya Upásaka Sampradáya," with its elaborate and scholarly preface, is considered by his countrymen as a monument of industry, patience, and perseverance under circumstances of great bodily infirmity. Bábú Peári Chand Mittra was the first distinguished Bangálí novelist, and had a high reputation as a humourist. Bábú Kesab Chandra Sen, the well-known social reformer, also contributed largely to the improvement of the literature of his native country. His best-known work, the "Sebaker Nibedan," will be read with interest even by those who do not belong to the Brahmo community. Although cut off at a comparatively early period of his career, Bábú Ráj Krishna Mukharji, the late Bangálí Translator to Government, achieved a considerable reputation by his patient researches regarding various obscure points of Indian History. Bengal has also had to mourn the loss of one of her most profound Sanskrit scholars, Pandit Tárá Náth Tarkaváchaspati. Perhaps he was best known in India for his Sanskrit Dictionary, but what gained for him his great European reputation was his well-known edition of the "Siddhánta Kaumudí." This obituary list would not be complete without a reference to one whose loss, though his home was in Benares, has been felt throughout the whole of Behar. Bábú Harishchandra was one of the few modern Hindí writers whose works have been accepted as classics by his countrymen. As a writer of a singularly pure Hindí, always fresh and piquant in his style, he was famous alike as a poet, a dramatist, a novelist, and a historian. It is satisfactory to learn that an enterprising publisher proposes to issue a collected edition of his many scattered writings.

The literary activity of some of the writers, who achieved distinction before the commencement of the period under review and who are still living, continues undiminished. Bábú Bankim Chandra Chatterji has published five works. Two novels, the "Ananda Mátha" and the "Debí Chaudhuráni," may be mentioned as having achieved considerable popularity. As one of the leading writers of the movement for the revival of Hinduism, he has written a short work, the "Krishna Charitra," in which he endeavours to prove that the conception of Krishna in the Mahábhárata is that of an ideally perfect specimen of humanity. Bábú Hem Chandra Banerjí, in his "Dasamahávidyá," has laboured to show that the ten Tántrik forms of Kálí are nothing but the different stages of the non-phenomenal development of the world. The "Mádhabilatá" of Bábú Sanjíb Chandra Chatterjí is described as an excellent novel, dealing with real life. Mr. R. C. Dutt in his "Sansár" gives a faithful account of Bangálí life in the mufassil, and, in another branch of literature, he has earned the gratitude of all Bangálís by his translation of the Rig Veda into their vernacular. Amongst miscellaneous works may be mentioned the collection of essays by Bábú Chandra Náth Basu entitled "Phúl o Phal," and the "Bángálí Lílá" of Bábú Dhírendra Náth Pál, which contains humorous sketches of real life in the country. The "Bibáha Bibhrát" is a clever farce in which the Anglo-mania of Bangálí Bábús is mercilessly exposed.

Taking the literature of the Lower Provinces as a whole, the following statement shows the number of publications received in the Bengal Library during the period under notice :—

	1882	1883	1884.	1885	1886
					For 6 months
Original works ...	1,180	1,737	1,838	2,100	1,008
Republications	242	200	210	268	137
Translations ..	146	281	342	363	209
Total	1,568	2,218	2,390	2,731	1,354

One thousand two hundred and eighteen books were received in the Library during the latter half of the year 1886, but they have not yet been catalogued.

The increase in the number of publications is very marked in Bangálí Unilingual Bangálí books have risen from 577 in 1882 to 1,206 in 1885, and to 600 during the first half of 1886. One of the most remarkable features of the period has been a movement for the revival of Hinduism. This has given rise to a copious literature of varying merit. The scope and importance of periodicals have increased greatly during these years. A large number of young men who have received high education are in the habit of writing articles in magazines published in the native languages. The periodicals now embrace various departments of literature—some are devoted exclusively to art, poetry, medicine or religion, while others are of the nature of miscellanies.

With regard to vernacular newspapers, while their number published in these Provinces stood at 56 in 1882-83, in January 1887 it was 63. There has therefore been an increase of 7 papers. The influence of the Native press of Bengal is not, however, to be measured by the number of Native newspapers published, but by the circulation possessed by the leading ones. During the last five years this circulation has been steadily increasing. In 1882-83 there were only two papers, namely, the *Bangábásí* and the *Sulabha Samáchár*, which possessed a circulation of 4,000 copies, and that was the highest at the time, but at present there are no less than four native papers having a circulation of 4,000 copies and upwards. The highest (said to be 20,000 copies) is now possessed by the *Bangabásí*. The *Damik*, a Bangálí daily newspaper, comes next after it, with a circulation of 7,000 copies; while in 1882-83 that of the leading daily newspapers in Bangálí was only 700. Regarding the tone of the native newspapers, it is a matter for deep regret that a press, which might be potent for good and an assistance to the Government of this country, is too often prone to misrepresentation and abuse.

Many works of value, which from their special natures could not be expected to achieve a wide circulation, have been published, either after receiving subventions from Government, or at the Government expense. Amongst those falling under the latter class may be mentioned the following, which have been printed at the Bengal Secretariat Press:—Mr. R. C. Sterndale's Historical Account of the Calcutta Collectorate is a work which can be read with interest not only by officials, but by the general public; Mr. R. C. Dutt's translation of the Rig Veda has already been mentioned. By Assistant Surgeon Brojo Nath Shaha's Grammar of the Lushai Language light has been

thrown upon a difficult and little known tongue, and Mr. G. A. Grierson's Seven Grammars of the Behar Dialects, and the same author's Behar Peasant Life, are the first attempt at a detailed linguistic survey of any considerable language tract in India. The first instalment of a Behari Dictionary by Mr. Grierson in conjunction with Dr. A. F. Rudolf Hoernle, has also appeared and will shortly be followed by a second.

BENGAL ECONOMIC MUSEUM AND ZOOLOGICAL GARDENS.

In the year 1882-83 the specimens in the Economic Museum, which had fallen into great disorder, were properly classified and arranged, and 153 new specimens were added to the Museum. From the 25th July 1882 to the 10th April 1883, 1,971 persons visited the Museum. This number was much in excess of the numbers recorded in any entire year since the establishment of the Museum in 1874, and served to show that it had begun to be appreciated as a place of general interest At the end of 1883 the collections of the Economic Museum, which at that time numbered about 15,000 specimens, were temporarily transferred to the care of the Executive Committee for the Calcutta International Exhibition of 1883-84, and were displayed in the Economic Court on that occasion. Two medals and three diplomas were awarded to the Bengal Government for the collections of the Museum. After the close of the Exhibition in March 1884 the collections were returned to the custody of the Committee of the Economic Museum with the following additions:—The large collection of economic products made under the orders of the Government of India for the International Exhibition; the large and valuable collection of art products of India purchased by the Bengal Government at the Exhibition; the valuable collections of models and ethnological objects prepared for the Exhibition; and the exhibits presented to the Bengal Government by Colonial Governments and private exhibitors. These additions have widely extended the scope of the Museum, which was originally intended to bring together specimens only of the ordinary products of Bengal, of its agriculture, its minerals, its manufactures, and its forests and wastes. These enlarged collections are now located in the buildings adjoining the Indian Museum, which were constructed for the Calcutta International Exhibition, and the premises in Hastings Street, which the Museum formerly occupied, have been abandoned. The collections are arranged and classified in five courts, viz. Artware, Ethnology, Economic, Timber, and Industrial. During 1885-86, 161 valuable specimens of jewelry, 18 samples of Jeypore marble carvings, and 288 specimens of economic products were added to the Museum, and the monthly average number of visitors was 24,505. This remarkable increase in the number was due to the removal of the Museum to the close proximity of the Indian Museum. In order to bring the Provincial Museum into more intimate relationship with the Indian Museum an arrangement has been arrived at, under which the Trustees of the Indian Museum will undertake the custody and administration of the Economic Museum, the cost both of the working staff and of the construction of suitable accommodation being borne by the Bengal Government. The institution thus established should in its future developments exercise some influence in the promotion of technical education.

The Alípur Zoological Gardens, which were established in 1875, were managed for some time by a quasi-independent Committee. In 1877, however, they were taken over as a Government Department. They are managed by a Committee appointed by Government, and are aided to the extent of Rs. 20,000 per annum. In 1883-84 measures were taken to utilise the Beganbári grounds opposite the gardens for the formation of a dairy farm and breeding establishment. Much benefit was expected from this new departure, but the hopes entertained have not been realised owing to a most unfortunate outbreak of rinderpest in 1885-86, from which the whole of the imported stock perished. In the same year season tickets were first issued at low rates, which after being held for a certain number of years entitle the holders to become life-members without further charge.

ARCHÆOLOGY.

The progress of archæology and of the conservation of ancient monuments in Bengal, if not very rapid, shows fairly good results. The total expenditure for conservation, including salaries during these five years, amounted to Rs. 1,70,000. Of these a lákh and a quarter was expended in the repairs of the great temple at Bodh Gayá, about eighteen thousand rupees in the conservation of Sher Sháh's tomb at Sasseram, twelve thousand on the Rohtásgarh, three thousand in Purí, and about nine thousand in the exhumation of the great Adina masjid at Hazrat Pandua and Gaur Petty sums were also spent in the conservation of the monument over the tomb of the first wife and child of Warren Hastings in Murshidábád, of the old tombs in the cemetery at Kásimbazár, of the monument to the victims of Mír Kásim at Patná, of the monument to the British soldiers at Chattra, and of the old Dutch tombs at Kalkapur

The works undertaken at Bodh Gayá are now complete, and comprise not only the conservation of the temple of Mahábodhi, but the repair of a vast number of old votive memorial and cinerary stupas, of the old Buddhist railing round the Bodhi tree set up originally by Asoka, of the existing remnants of almost all the old temples and sacred Buddhist objects seen and described by Hiuan Tsiang or mentioned in Buddhist books, of portions of the great monastery built by the Ceylonese King, of the Buddha Kunda tank with its steps and covered ghát and a portion of the cloisters round, and of the more deserving of the very numerous sculptures and inscriptions which were brought to light in the course of the operations. But, although the expenditure appears large, it has not rendered further exploration needless Only last year some careful excavation by trial trenches undertaken by the Archæological Survey disclosed the lower portions, almost intact, of one of the eight great monasteries which once stood near the great temple. This makes the second of the great monasteries which have been actually found, the first being the great Ceylonese one already mentioned as partially repaired, and there are therefore six more yet to be looked for. When it is remembered that here for fully fifteen hundred years stood the temple and tree, which during that period continued to be, with rare interruptions, the head-quarters of the State religion, and that for eighteen hundred years before the Muhammadan invasion it was the holiest spot in the world for a vast and wealthy body of believers, it is not surprising that a lákh and a quarter of rupees should fail to exhaust the possibilities of further interesting research. It would rather have been surprising if so small a sum

had been found sufficient for the thorough exploration of such a spot, and at the same time for the renewal of a building which could not have cost less than ten lákhs exclusive of the accessory buildings in the surrounding Necropolis. Of the sculptures, those which had undoubtedly belonged to, and formed a part of, the temple or of the other conserved monuments, have been reset in their original positions, the missing ones being replaced by such others as best suited the vacant positions; but of the surplus sculptures, although a very large number are still at Bodh Gayá, some have been placed in the Indian Museum in Calcutta, while others are now in the Museums at Lahor, Jaipur, South Kensington, Oxford, Edinburgh, Berlin, and Vienna.

In the tomb of Sher Sháh at Sasseram repairs were confined to the main building alone, and no attempt was made to carry out such thorough renewals as those at Bodh Gayá, nor to restore the causeway across the tank giving access to the tomb. All that has been done in regard to the causeway has been to pierce it, as a temporary measure, with a couple of openings to permit the free circulation of water in the tank, and to construct inlets and outlets by which it may be always renewed and kept wholesome. The proper repair of the causeway must be postponed till funds are available.

In the Rohtásgarh palace four distinct courts with their buildings have been repaired. The one immediately facing the grand entrance had been apparently intended as a dancing hall with retiring chambers and corridors and latticed windows for the female members of the household. It had originally been fitted with doors turning on pivots, working in sockets chiselled in the upper and lower stone work near the door sills. This has now been fitted with doors and windows and rendered habitable. As many of the other buildings as admitted of it have also been repaired, and have been made habitable, so far as was consistent with their original purpose, doors having been fitted into all such openings as appeared, from the still existing socket holes for pivots, to have been originally provided with them. The great Díwán-i-Ám or Hall of Audience, which could never have been intended as a place of residence, and never had doors of any kind originally, but which had at some later period been fitted up with doors and windows as a shelter for visitors to Rohtásgarh, has been divested of all the accretions, and restored (with the exception of the stone lattice screen and the painted floral decorations and glazed tiled work) to the condition it was in when it was used as an actual Díwán-i-Ám by the then Viceroy, Mán Singh. The limited funds precluded all attempts at painting or complete restoration, nor has it been found possible to repair all the buildings in the minor courts. All the accumulated rubbish has, however, been removed, so as to show clearly the arrangements of the numerous small buildings with their courtyards, the baths, cisterns, and domestic arrangements. Outside the palace also some effort has been made to preserve the more important buildings. Among them the small temple on the right hand side of the main road, originally leading from the palace to the Ráj Ghát gate of the fort, has been cleared of all the rubbish, and such repairs as were urgently necessary have been executed to the sanctum. The Ráj Ghát gate has also been to some extent cleared of *debris*, but no attempt has been made towards repairing either it or the Commandant's quarters adjacent. Nothing has been done to the masjid at the extreme east end of the fort, which is in fact too far destroyed to admit of conservation; but the two fine temples at the peak have both been cleared of *debris* and fallen stones, and enough has

been done to preserve them from destruction for some years. At the extreme west end of the fort the gate opening on to the narrow neck connecting the plateau of Rohtás with the main plateau was originally fortified with extraordinary care, as being the weakest point of the fort. This gate, consisting really of two distinct gates close to and defending each other, has been cleared of the enormous mass of fallen *debris* under which it had been buried; but the difficulty experienced in obtaining water has rendered it difficult and expensive to carry on any large work.

In Purí the great mass of fallen stones lying in a confused heap and filling the hall of the great temple at Kanarak, known as the Black Pagoda, has been removed. Besides this, the more important sculptures, some weighing as much as 20 tons, have been rescued from destruction and placed for safety on platforms near the temple. The overhanging and dangerous cornices and doorways have been strengthened, and the great navagraha stone, which once formed the top lintel of the doorway, has been replaced in position: but no attempt has been made to repair, or even to remove, as the necessary preliminary to future repair, the vast accumulation of stone from the ruin of the main sanctum behind the now partly restored hall. As the hall is ninety feet square and a hundred feet high, the ruined spire of the sanctum behind was probably not less than three hundred feet in height.

In the Adina masjid at Hazrat Pandua the accumulation of *debris*, under which the building was to a great extent buried, has been wholly cleared away, and its hitherto hidden prayer niches have been now disclosed. The floral ornamentation in them taken from older Hindú remains (dating probably to the eighth century A D, and used sometimes with extensive, sometimes with little, alteration,) and the Muhammadan geometric ornamentation executed, sometimes on the reverse of a Hindu sculpture, sometimes on the chiselled-away surface of older Hindu work, is as good as any to be found in Agra, Delhi or Ajmer. So also the cut and moulded brick ornamentation in other portions of the masjid is not inferior to any found elsewhere in Bengal. The excavation has also disclosed the lower courses of an old Buddhist stupa, and of lines of boundary walls and of a gate, built of bricks set in mud cement, running obliquely to the walls of the masjid, and eccentrically placed with regard to it. Traces of masonry ghâts built of bricks also set in mud, and therefore presumably pre-Muhammadan, have also been found leading down into some of the numerous surrounding tanks. The trees which had rooted themselves in the walls have been pulled out, where it was possible to do so, without destroying the roofs and walls, and cut down close, where this was not possible, and the court of the masjid has been cleared and sloped so as to run off the rain water readily. This will in some measure help to prevent the remains from being destroyed till measures can be taken to preserve what still stands by substantial repair, of which the clearing of the fallen *debris* was a necessary preliminary. A well has been dug in the courtyard, and good water is now obtainable in the dry season, when all the tanks round the masjid become dry. The work of clearance has supplied a large quantity of good bricks, which will be useful for future undertakings.

Some work has also been done to the various buildings in Gaur by cutting down the jungle in the courts, and on the roofs and walls of the more interesting buildings, and rendering them accessible; but it has not been found possible to do more for these buildings at present.

The Archæological Survey, which has been recently organised, has during the past year and a half collected materials for the illustration, with technical accuracy and completeness, of the architecture and antiquities of the great Adina masjid, of the tombs of Sher Sháh and of his father Hasan Khán at Sasseram, and of the palace at Rohtásgarh, and of other objects of interest. These subjects will occupy a hundred plates, of which some are now completed, while of the rest the materials are either ready or expected to be ready by the close of the field season, though the drawing can only be commenced during the recess. Besides preparing these plates and the necessary letter press regarding the architecture thus illustrated, the survey has discovered four hitherto unknown or unexplored sites in the Bhágalpur circle,—one near Bhágalpur city (the old mounds near Sháh Jangí tank), and three in the Bhágalpur district; two in the Sháhabád district of the Patná circle one in the Baxar sub-division, being the mounds of Kant, which are, so far as can now be judged, the ruins of large and extensive temples of the fifth to the eighth centuries A.D , and the remains in the old fortress of Sher Garh in the Sasseram sub-division); and two in the Presidency circle (the temples at Chogda, the head-quarters of the Bengal Archæological Survey, and the ruined mounds, the remains of palaces, temples, and of a fort at Devagrám, about eight miles east of Ránághát, in the Ránághát subdivision of the Nadiyá district).

PUBLIC WORKS.

The operation of the Provincial Financial Contract has been more keenly felt in the Provincial side of Public Works Department than in any other branch of the public service. After considerable discussion the contract grant was settled on the basis of 75 lákhs a year for public works of all kinds, including the maintenance, repairs, and working expenses of all railways and canals, the construction of new works, and the construction, maintenance, and repair of civil roads and buildings, but exclusive of interest charges. To this a lump sum of 15 lákhs, equivalent to three lákhs a year, was credited to the Local Government Virtually, therefore, the contract proceeded on the basis of an annual grant of 78 lákhs for public works of all kinds.

The following table shows the actual expenditure from Provincial funds on public works during each year of the quinquennial period. The figures include items of expenditure outside the regular departmental expenditure of the Public Works Department, and will therefore not be found to agree with the departmental figures given later on :—

	1882 83	1883-84	1884 85	1885-86	1886 87 (estimated)
	Rs.	Rs.	Rs.	Rs	Rs
State Railways (Capital) .	18,49,000	8,27,000	1,32,000	76,000	15,000
Subsidised Railways	11,000	40,000	58,000	25,000	..
Irrigation (Capital) ..	17,18,000	5,04,000	2,02,000	3,76,000	3,45,000
Civil Works	67,29,000	47,19,000	30,13,000	27,63,000	33,08,000
Total ..	1,03,07,000	60,89,000	34,05,000	32,40,000	36,68,000

The dwindling of the expenditure under every head is most striking. The various heads of Public Works expenditure will now be dealt with separately, and the reason for the diminution in each case will be discussed in its proper place.

ROADS AND BUILDINGS.

When, in April 1882, Sir Rivers Thompson assumed charge of the office of Lieutenant-Governor of Bengal, he found Public Works being actively pushed forward.

The total outlay on Imperial works, *i.e.*, works carried out for, and at the expense of the Imperial Government, and not debited to Provincial Revenue, for the year 1883-84 amounted to upwards of Rs. 15,00,000: in the following year it was 10½ lákhs, but during the last two years the grants were reduced to less than half those of the previous years. Several important works were completed for the Imperial Government, some of which will be found mentioned below.

Under the head Provincial Services the course of expenditure was similar In the year 1881-82 the expenditure on provincial public works amounted to nearly 67 lákhs, and it was maintained at this figure in 1882-83. During the first two years of his administration Sir Rivers Thompson carried into practice the principle that it is bad policy to have the accumulations of provincial revenues lying idle in the Imperial treasury, and he endeavoured to provide for the completion of works in progress and to meet the demand for new works to the full extent of the balance at credit of the Province. The offices of the Bengal Government in Calcutta were completed, court-houses were completed or constructed at Jessor, Maimansingh, Farídpur, Pabná, Gayá, Ránchí, and Darbhangá, jails built at Dacca, Midnapur, Baxar, Gayá, Ránchí, Darbhangá, Bogra, Maimansingh, and Purúliá; the Secretariat offices at Dárjiling were begun and completed, numerous subdivisional court-houses and munsiffs were constructed, and a number of other miscellaneous public improvements were carried out. By the end of 1883-84, however, the provincial balances had been reduced to Rs. 6,87,000, and the budget grant for 1884-85 was therefore restricted to 30 lákhs. In 1885-86, under pressure of the complications on the North-Western frontier, the grant was again cut down to Rs. 27,63,000, while for the year 1886-87 it has not been possible to provide more than Rs 33,08,000 These sums are quite inadequate to meet the wants of the Province. There are very many important works to be undertaken in order to develop the efficiency of the administration and the resources of the country. It has been impossible in the last two years to do more in the matter of original works than to finish one or two of the more important buildings already in progress, and nothing can be done to meet the crying demand from almost every district of the Province for more munsiffs, judicial court-houses, and revenue offices. The only two large departments which are fairly well equipped in the matter of building accommodation are the Jail and the Education Departments, the former of which received much attention from Sir Ashley Eden, while the latter has been largely assisted by private munificence and from other external sources.

There were no changes of importance in the administration of the Public Works Department during the period under review. The supervision of all public works in Calcutta was placed under the charge of a Superintendent of Works at the commencement of the year 1882-83, thus giving the Superintending Engineer of the Central Circle greater opportunities of inspecting works in the interior. The Jalpáiguri Division of the Eastern Circle was abolished at the beginning of the year 1886-87, and the work of the Division was

divided between the Dárjíling and Rájsháhí Divisions. Towards the middle of the same year the Central Circle was abolished, and the Divisions comprising it were amalgamated with the Eastern and Western Circles, the Chittagong and Jessor Divisions being transferred to the former, and the Bardwán Division to the latter. In consequence of this change the head-quarters of the Western Circle have been removed from Dinapur to Calcutta.

The following is a brief account of the principal operations carried out by this branch of the Public Works Department. Under the head of Imperial Works may be mentioned:—

Military Works.—The new Accounts Office in Koilá Ghát street at a cost of Rs. 7,02,141.

Civil Works.—The Financial Offices at a cost of Rs. 9,01,953.

The new Central Press at a cost of Rs. 9,32,620.

Surveyor-General's Office, Rs. 3,60,555.

Calcutta Mint.—Silver Mint re-roofed, Rs. 1,94,119.

Post Office.—New building for the office of the Director-General of the Post Office, Rs. 1,76,123.

The following Provincial works were undertaken during the period under review:—

Civil Buildings—Secretariat Buildings at Calcutta for the Local Government, Rs. 13,72,123.

Ditto at Dárjíling (including furniture), Rs. 1,38,796.

Eden Sanitarium at ditto, Rs. 1,73,312.

Swarnamayí Hostel for lady medical students, Rs. 1,37,766.

New Collectorates at Gayá, Darbhangá, and Jessor.

New Judge's court-houses at Pabná, Farídpur, and Maimansingh.

Educational Buildings.—Two blocks of quarters for the native students of the Engineering College, Shíbpur, and a residence for the Principal of the Calcutta Madrissa.

In addition to the above, the causeway on the Grand Trunk Road across the Son river has been remodelled. Feeder roads for the Northern Bengal State Railway have been built at a cost of Rs. 1,12,000, and several roads in Chutiá Nágpur and Dárjíling have been improved and extended. Amongst miscellaneous public improvements undertaken may be mentioned the construction of important works for the diversion of the Calcutta storm water from the Calcutta canals, a light-house built on Shortt's Island at the mouth of the Damrá river, and the construction of buildings at Hookeytollah in the False Point harbour in place of those swept away by the cyclone of September 1885. The port of Chittagong has been given a pure water-supply at a cost of about Rs. 7,000, and water-works have been undertaken and partly completed at Bhágulpur, on which it is contemplated to spend at present Rs. 2,30,000. To make these complete will, it is calculated, cost altogether about three and a half lákhs.

The Bengal Ironworks Company was started in 1875 with the object of working the iron-field at Barákhar in the Hazáribágh district, but its success

was small, and after a brief career of three years the Company suspended operations in 1878. In May 1882 the works were purchased by Government, and were placed under the control of the Public Works Department in February 1883. Pig-iron began to be run in January 1884, and the financial results have since been very satisfactory. It is estimated that the profits for the current year will amount to something like Rs. 60,000, or say 8 per cent. on the capital expended in purchasing the concern. The result has been achieved in spite of the disadvantage that the prices of cast-iron goods and pig-iron have fallen off during the last ten years by 10 to 15 per cent. The chief factor in the production of these very satisfactory results has been the management, which has excelled in many features of economy and close attention to details; and the consequence is that the works are enabled to put their products into the market at a very low rate. Moderate prices are a characteristic feature of the manufactures. The principal articles at present turned out are cast-iron pipes, cylinder and screw-piles, railway sleepers and chairs, axle boxes for railway waggons, ornamental castings and agricultural implements. The ploughs made at those Works have found a large sale amongst Native cultivators, and an improved water-lift is also much sought after. It is gratifying to be able to record that the action of the Government has succeeded thoroughly in fostering a moribund industry into vigorous life.

The expenditure from the District Road Funds, which is raised and administered by District Committees, and over which the Public Works Department has only a general control, has averaged about 36 lákhs. The work of the Committees was for the most part efficiently done, but it is clear that the funds at their disposal will not permit their effecting very much in the way of extending and completing the general system of road communications.

The cyclone which passed over Orissa in September 1885, besides destroying the buildings at Hookeytollah, severely damaged that portion of the Orissa Trunk Road lying between the Bráhmaní and Baitaraní rivers . the tidal-wave which accompanied it breached the canal embankment near Balasor in several places. Had it not been for this embankment, the wave would have passed over a vast area of cultivated land, and the loss of crops would have been enormous The Murshidábád embankment near Lálthikurí burst; the adjoining country was inundated, and great damage was caused to the Eastern Bengal and Central Bengal Railways. The damage done by these disasters is described at greater length in the section on the economic condition of the people.

The following tables give the figures of the expenditure of this branch of the Public Works Department during the quinquennial period.

Statement showing the expenditure under the various service heads for the years 1882-83 *to* 1886-87.

Service Heads.	Outlay on Original Works.					Outlay on Repairs.					Total.
	1882 83	1883-84.	1884 85.	1885-86.	1886-87	1882-83.	1883-84.	1884-85.	1885 86	1886-87	
IMPERIAL.	Rs.	Rs.	Rs.	Rs	Rs.	Rs.	Rs.	Rs	Rs	Rs.	Rs.
Military Works											
Works	2,32,347	3,26 750	1,60,723	2,215	20,500	23,443	27,302	23,684	16,953	27,700	5,02,617
Establishments ...	55,204	75,000	23 088	500	4,721	5,217	6,267	5,180	3,722	6,879	1,36,858
Tools and plant	3 474	4,900	1,500	33	300	375	400	340	203	400	21,025
Total Military Works	2 88,025	4,06,650	1,25,261	2,748	25,521	31,035	33,969	29,204	20,948	34,479	6,98,340
Civil Works.											
Works ...	8,01,455	10,65,016	7,74,279	3,59,908	1,79,300	2,75,362	1,01 910	1,61,783	1,37,414	2,16,500	40,66,924
Establishment ..	1,61,009	2,47,656	1,75 080	61,885	39,083	55 718	23,261	30,707	22,938	47,917	8,72,054
Tools and plant ...	10,000	15,073	11,277	3,964	2,937	3,006	1,500	2,356	1,469	3,063	54,347
Total Civil Works	9,72,964	13,48,045	9,61,236	4,25 754	2,21,320	3,34,086	1,26,671	2,00,846	1,57,821	2,67,480	50,17,325
Total Imperial	12,61,989	17,55,295	10,86,497	4,28,502	2,47,041	3,65,023	1,60,640	2,29 050	1,78,769	3,01,959	56,15,665
PROVINCIAL.											
Civil Buildings	31,55 821	14,69 204	6,21,309	3,25,246	7,71,100	4,80,378	3,81,694	1,78,344	3,72,108	4,34,400	81,09 284
Communications ...	5,54,672	3,20,105	1,40,360	—2 708	1,10,100	10,04,965	8,08,253	5,83,416	7,01,015	8,55,600	51,81,621
Miscellaneous Public Improvements	91,788	1 81,243	76,077	27,024	1,27,800	61 461	63,055	47,033	57,133	80,000	7,73,114
Establishment ...	6,98,455	5,86,537	4,07,780	3,12,148	4,57,743	2,76,078	4,08,906	4,80,180	0,68 757	6,09,257	54,99,640
Tools and plant	1,12,160	24,037	6,829	7,286	21,579	44,330	16,246	6 585	22,595	20,121	2,91,087
Profit and loss			153					125			253
Suspense accounts	1,76,865	1,29,795	38,568	—4,278	—64,950	69 909	87,729	87,013	—13,265	—85,650	3,72,136
Total Provincial	47,89,191	27,29,922	13,81,456*	6,64,709	14,24,272	18,93,021	18,46,188	13,32,645	20,01,843	18,95,728	2,00,18,070
LOCAL FUNDS											
Incorporated Local Funds .	17,972	21,185	22,547	7,500	125				66	275	69,670
Excluded ditto	23,277	10 220	803	18 075	4,398	3,068	31,478	2 281	5 961	5,607	1,00 158
District Road Funds	15,88,909	14,94,502	13,59,028	13,14,969	17,07,505	20,73,185	24,59 077	23,00,308	20,40,602	20,58,455	1,81,27 221*
Tuscavee ...		3,25,205	1,37,850				8,487	14,500			4,89,198
Contributions, Nuzzmut ..						255					255
Ditto, Imperial Civil Works						9,815	11,271	19 085	13,135	4,105	51,632
Ditto, Provincial ditto .	35,415	48,872	50,198	1,78,187	1,81,701		806	769	492	2,116	4,18,520
Grand Total	77,16,644	65,18,291	40 38,379	21,06,912	34,85,042	43,45,262	43,17,582	38,02,728	41,01,108	42,68,241	4,52,90,229

* Exclusive of Rs. 32,35,069 on account of expenditure by civil officers on collection establishment, administrative charges, &c

Statement showing the outlay incurred in the Public Works Department on account of buildings under each Department of the Administration of Bengal from the years 1882-83 *to* 1886-87.

	Outlay on Original Works					Outlay on Repairs					Total
	1882 83	1883 84	1884 85	1885-86	1886-87.	1882 83.	1883-84	1884 85	1885-86	1886-87	
CIVIL BUILDINGS	Rs	Rs	Rs	Rs	Rs	Rs	Rs.	Rs	Rs	Rs.	Rs
Provincial Services—(Imperial)											
Administration—											
Land Revenue—											
Court-houses, treasuries, and record rooms	4,82,754	2,83,661	1,39,116	55,689		1,08,021	65,129	21,918	88,895		
Circuit houses								6 440	28 108		
Excise buildings	669	127	5,350	50,077		9,145	4,163	651	3,647		
Residence for local Government	1,874	1,07,820	68,703	32,379		30,856	40,804	32 795	59,052		
Secretariat offices	4,40,687	1,25,943	1,59,965	61,051		18 547	27,145	17,058	20,901		
Board of Revenue buildings				6,44		8,817	394	408	211		
Stamp and Stationery ...	504			36		3,061	981	181	1,238		
Minor Departments—											
Museum buildings	15,772	2,72,932	10,789	5,606		1,453	6,247	1,144	5,258		
Monuments and antiquities	50,178	35,190	17,490	3,284		777	24	455	669		
Law and Justice—											
High Court buildings	6,681	2,390	9,738	5,351		5,816	7,871	5,298	9,660		
Small Cause Court buildings	58,256	5,240	554	36		2,018	303	526	643		
District (subdivisional) Court buildings	4,65,382	3,84,568	2,21,760	1,72,948		55,686	51,064	31,940	98,338		
Ecclesiastical—											
Lord Bishop's Palace						905	13,152	237	894		
Churches	11,111	18,786	—1,080			22,690	20,593	13 941	17,388		
Burial grounds	11,444	8,650	1,513	21,310		9,029	8,800	3,456	4,877		
Provincial Services—(Provincial)					10,88,454					6,13,181	
Jails—											
Central Jails	3,17,705	87,773	13,405	5,379		8 420	10,978	17,511	32,630		
Districts	3,40,824	1,47,250	—6,878	33,391		72,211	44,105	23,884	56,220		
Lock-ups	65,354	56,888	10,211	25,125		13,310	9,630	4,070	24 831		
Police ...	1,51,816	1,01,104	42,451	31,978		22,049	21,745	11,624	28,123		
Educational—											
Government colleges	3,24,293	1,07,565	61,200	11,961		23,386	7,028	7,390	20,435		
Ditto schools ..	72,548	37,104	53,786	37,990		43,954	33,281	6,983	39,234		
Medical—											
Hospitals and dispensaries ..	5,28,578	61,900	69,929	12,786		24,033	27,639	12,037	34,797		
Lock-hospitals						2,309		2,876	721		
Medical Colleges and schools	1,510		994	2,310		4,507	48,719	946	639		
Lunatic Asylums	2,470	604	13,250	4,688		6,417	9,341	2,038	11,519		
Customs buildings	3,769	145	500			17,567	2,251	1,589	1,437		
Miscellaneous—											
Registration . . .	17,846	8,137	7,141	3,472		865	2,604	847	2,213		
Miscellaneous or general	84,923	7,615	11,617	15,359		15,142	23,162	17,440	16,807		
Public Works buildings	1,00,821	71,169	92 955	13,093		7,769	18,575	19,983	28,585		
Total	38,06,953	20,23,103	10,23,917	6,19,453	10,88,454	5,26,385	5 26,068	3,85,736	6,31,613	6,13,181	1,11,42,1

Statement showing the expenditure incurred from the District Road Funds on Public Works during the financial years 1882-83 *to* 1886-87.

Names of Districts.	1882-83	1883-84.	1884-85.	1885-86	1886-87 (approximate)
	Rs.	Rs.	Rs.	Rs.	Rs.
BENGAL					
Western Districts.					
Bardwan Division — Bardwán	1,20,780	1,59,897	1,23,827	1,05,029	1,60,706
Bánkurá	35,406	52,581	26,475	29,137	34,640
Birbhúm	51,764	55,994	68,293	72,231	25,251
Midnapur	1,39,489	1,50,959	1,41,354	1,17,984	1,08,253
Hugli and Howrah	91,917	1,79,094	1,00,709	1,02,853	80,397
Central Districts.					
Presidency Division — 24 Parganás	1,21,547	1,39,833	1,03,694	1,05,681	1,36,222
Nadiyá	1,34,457	84,847	52,686	65,341	84,584
Jessor	85,866	82,059	76,921	68,407	81,646
Khulna	2,530	34,238	62,201	52,875	90,785
Murshidábád	64,182	66,586	54,811	61,526	45,789
Rajshahi Division — Dinagepur	97,078	75,003	87,750	75,158	79,169
Rájsháhi	78,806	51,879	74,494	62,037	73,754
Rangpur	91,436	1,01,790	1,40,101	86,057	1,32,419
Bogra	66,528	59,157	39,964	27,290	43,457
Pubná	42,352	51,049	53,460	39,787	42,025
Dárjiling	14,135	10,862	20,303	17,598	11,127
Jalpáiguri	45,459	54,552	41,428	16,754	74,041
Eastern Districts					
Dacca Division — Dacca	79,116	51,614	64,875	70,401	1,01,386
Faridpur	45,515	42,720	42,643	89,380	59,965
Backergunj	1,04,230	1,04,127	98,019	71,849	76,340
Mymensingh	1,48,505	1,00,820	1,92,785	1,16,720	2,30,984
Chittagong Division — Chittagong	1,02,699	61,067	94,243	79,582	90,557
Noakáli	1,31,145	1,29,714	70,049	66,770	81,063
Tipperah	80,402	54,099	55,785	80,988	1,00,131
Chittagong Hill Tracts	11,016	13,926	9,850	9,398	9,399
BEHAR					
Patna Division — Patná	2,07,795	1,00,783	1,52,004	1,52,939	97,792
Gayá	2,09,404	1,95,731	1,57,290	2,29,940	3,58,400
Shahábád	1,38,291	1,75,041	1,48,694	1,21,064	1,10,851
Muzaffarpur	1,08,801	1,34,080	1,75,306	1,83,173	1,45,480
Darbhanga	1,50,579	1,63,788	1,21,180	1,35,904	86,336
Saran	1,17,117	1,20,791	1,48,275	1,14,028	1,00,089
Champáran	89,558	1,09,606	92,881	86,009	72,818
Bhagalpur Division — Monghyr	1,63,287	1,34,327	1,70,185	1,80,217	1,00,844
Bhagalpur	1,08,144	1,06,041	1,50,229	1,26,060	1,01,243
Purneah	83,370	77,705	70,631	74,471	76,518
Maldah	29,693	25,875	36,418	32,176	56,902
Santál Parganás	34,792	34,625	57,754	47,143	28,937
ORISSA					
Orissa Division — Cuttack	41,499	48,060	44,275	48,229	78,009
Puri	24,196	24,552	30,938	30,155	29,207
Balasor	19,415	30,026	40,877	27,619	47,988
CHUTIA NAGPUR					
South West Frontier Agency					
Hazaribágh	44,148	44,279	38,488	36,984	27,734
Lohárdaga	58,043	53,754	61,720	57,419	57,092
Singbhum	2,502	11,907	14,058	4,493	10,004
Mánbhum	21,960	26,877	24,175	26,078	12,296
Total	36,62,085	36,84,269	36,59,936	35,55,571	37,65,900
Original works	18,37,825	11,91,172	11,07,707	10,62,522	13,80,158
Repairs	17,45,582	18,89,420	18,73,984	16,48,949	16,63,827
Establishment	5,15,504	5,65,468	6,29,704	5,97,782	6,61,476
Tools and plant	30,091	14,917	42,417	37,881	98,979
Toll and ferry establishment and contingencies	3,083	3,297	6,314	8,837	21,520
Total	36,62,085	36,84,269	36,59,936	35,55,571	37,65,960

Statement showing the expenditure under the various service heads for the years 1882-83 to 1886-87.

Service Heads	Outlay on Original Works. 1882-83	1883-84	1884-85	1885-86	1886-87	Outlay on Repairs. 1882-83	1883-84	1884-85	1885-86	1886-87	Total
IMPERIAL	Rs	Rs	Rs	Rs.	Rs	Rs.	Rs	Rs	Rs.	Rs.	Rs
Military Works											
Works	2,32,247	3,20,750	1,00 728	2,215	20,500	25,443	27,303	22,684	16,958	27,700	8,02,517
Establishments	53,204	75 000	23,048	500	4,721	5,817	6,707	5,180	3,752	6,379	1,83,858
Tools and plant	3 474	4,900	1,500	33	300	375	400	340	338	400	11,965
Total Military Works	2 88,926	4,00,650	1,25,201	2,748	25 521	31,635	35 069	28,204	20,948	34,479	9,98,340
Civil Works											
Works	8,01,455	10,85,016	7,74,279	3,50,906	1,70,300	2,75,362	1,01 010	1,61,788	1,31,414	2,16,500	40,88,924
Establishment	1,61,009	2,47,656	1,75,080	61 885	30,683	55 318	24,261	36,707	22,938	47,917	8,72,054
Tools and plant	10,500	15,973	11,277	3,964	2,537	3,608	1,500	2,356	1,469	3,063	56,247
Total Civil Works	9,72,964	13,48,645	9,61,236	4,25 754	2,21,520	3,34,288	1,26,671	2 00,846	1,57 821	2,67,480	50,17,225
Total Imperial	12,61,889	17,55 295	10,86,407	4,28,502	2,47,041	3,65,923	1,60,640	2 29 050	1,78,769	3,01,959	60 15,565
PROVINCIAL											
Civil Buildings	31 55,761	14,69 204	6,21,309	3,2[illegible] 246	7,71,100	4,36 378	3 81 694	1,73,384	3 32 168	4 34,400	81,00 234
Communications	6,54,572	3,29 106	1,40,360	-2,706	1,10 100	10 04 965	8,93 853	5 88 316	7 05,055	8,58,600	51,81,621
Miscellaneous Public Improvements	91 788	1,81,248	76,677	27 024	1,27 800	61 361	61 053	47,033	17,183	50,000	7,73 114
Establishment	6 98,455	5,96,537	4,97 780	3,12 1,8	4,57,713	2 76 078	4 03 206	4,80,189	6,68,757	6,09,237	53,39,640
Tools and plant	1,12,160	21,037	6,820	7,28[illegible]	21,870	41,330	16 246	6 585	22,595	20,121	2,91,067
Profit and loss			133					125			258
Suspense accounts	1,76,865	1 29,795	38,368	—4,274	—64,350	69 909	87,720	37 013	—13 265	—55 650	3,72,136
Total Provincial	47 89,191	27,29,922	*11 81 156	6,04,709	14,24,272	18,93,021	18,45,183	13,32 645	20 61,943	18 05,728	2,00 18,070
LOCAL FUNDS											
Incorporated Local Funds	17,072	21,185	22,547	7,500	195				60	275	69 670
Excluded ditto	23 277	10 220	803	13,070	4,308	3,063	31,478	2 281	5 901	5 602	1 00 158
District Road Funds	15,88,900	14,24 592	13 59,628	18,14,409	17,07,505	20,73,185	22,50,677	23,00 308	20,40,602	20,58,455	1 81 27 221*
Tuccavee		3,28 205	1,37,850				8 187	14,596			4,89,138
Contributions, Nizamut						255					255
Ditto Imperial Civil Works						9,815	11 291	13,085	13,431	4,106	51,632
Ditto, Provincial ditto	35,415	48,872	50,198	1,78,157	1 61,701		806	763	402	2 116	4 18,520
Grand Total	77,16,644	63,18,291	40 38,479	26,06,912	34,85,042	43 45 262	43,17,562	38,92,728	43,01,165	42,68,241	4,62 90 229

* Exclusive of Rs 32,55,069 on account of expenditure by civil officers on collection establishment administrative charges, &c

Statement showing the outlay incurred in the Public Works Department on account of buildings under each Department of the Administration of Bengal from the years 1882-83 to 1886-87.

	Outlay on Original Works 1882-83	1883-84	1884-85	1885-86	1886-87	Outlay on Repairs 1882-83	1883-84	1884-85	1885-86	1886-87	Total
CIVIL BUILDINGS	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs
Provincial Services—(Imperial)											
Administration—											
Land Revenue—											
Court-houses, treasuries and record rooms	4,82,754	2,83,661	1,39,116	55,889		1,01,021	88,123	21 918	88 80[illegible]		
Circuit houses								6,140	25 168		
Excise buildings	660	127	5 356	56 977		8 245	4,168	651	3 647		
Residence for local Government	1,874	1,07,8[illegible]0	68 703	32,379		30,856	40 404	32 795	59 652		
Secretariat offices	4,40,387	1,35,943	1,59,963	61,041		11,647	27,145	17,058	20,601		
Board of Revenue buildings				6,443		8,117	594	406	211		
Stamp and Stationery	504			16		3,061	981	181	1,238		
Minor Departments—											
Museum buildings	15 772	2,72 842	10 789	5 608		1 453	8 247	1,144	5,258		
Monuments and antiquities	51,176	35 106	17,400	3,381		777	24	435	589		
Law and Justice—											
High Court buildings	6 681	2,300	9,738	5,351		5 516	7 571	5,295	9,600		
Small Cause Court buildings	58,264	5,260	554	36		2,013	303	526	843		
District (subdivisional) Court buildings	4,09,382	3,84,508	2,21 760	1 72,949		55,686	51,064	51,940	98,338		
Ecclesiastical—											
Lord Bishop's Palace						905	13 152	237	804		
Churches	11,111	13 786	—1 080			22 690	20,582	13 041	17,338		
Burial grounds	11,444	8,269	1 513	21,310		8,029	3,800	3 466	4,577		
Provincial Services—(Provincial)					10,88,454					6,13,181	
Jails—											
Central Jails	3,17 795	87,773	13,405	5,379		8 320	19,978	17,531	39,630		
District	5,09 824	1,47,280	—6,5[illegible]8	33,391		72,211	41,165	23,384	56,220		
Lock-ups	65,154	58,888	10 211	25,125		13 310	9,030	4 570	21 831		
Police	1 [illegible]1,816	1,03,194	42,434	31,078		22,049	21 745	11,524	28,123		
Educational—											
Government colleges	3,24,298	1,97 565	81,260	11,951		22,496	7,028	7,300	20,436		
Ditto schools	72,348	37,104	53,786	87,990		42 054	33,281	6,083	39,234		
Medical—											
Hospitals and dispensaries	5,25,578	61,900	69,029	12,786		24,058	27,029	12,057	34,767		
Lock hospitals						2,309		2,376	721		
Medical Colleges and schools	1,510		904	2,310		4,307	43,710	940	639		
Lunatic Asylums	2,470	604	13,250	4,088		6,417	9,341	2,638	11,513		
Customs buildings	3,762	145	509			17,667	2,251	1,589	1,437		
Miscellaneous—											
Registration	17,846	3,137	7,141	3,472		805	2,604	847	2,218		
Miscellaneous or general	84,028	7,015	11,017	15,649		15,142	24,162	17,146	16,307		
Public Works buildings	1,00,821	71,109	92 955	13,034		7 769	18,373	19,982	28,848		
Total	38,06,969	20 23,108	10,23,917	6,18,455	10,88,454	5,26,356	5,26 068	3,85,736	6,81,017	6,13,181	1,11,42 844

Statement showing the expenditure incurred from the District Road Funds on Public Works during the financial years 1882-83 *to* 1886-87.

Names of Districts.	1882-83.	1883-84.	1884-85.	1885-86.	1886-87 (approximate).
	Rs.	Rs.	Rs.	Rs.	Rs.
BENGAL					
Western Districts.					
Bardwan Division — Bardwán	1,26,780	1,59,897	1,28,827	1,05,022	1,60,706
Bankurá	35,466	52,531	26,475	29,137	34,040
Birbhúm	51,764	55,094	68,293	72,231	25,251
Midnapur	1,30,883	1,50,959	1,41,354	1,17,984	1,08,253
Hugli and Howrah	91,917	1,79,094	1,90,709	1,02,853	80,397
Central Districts.					
Presidency Division — 24-Parganás	1,21,547	1,39,883	1,03,694	1,05,681	1,26,222
Nadiyá	1,34,157	84,847	52,686	65,841	82,584
Jessor	88,966	82,059	70,921	68,367	81,646
Khulna	2,530	34,238	62,241	52,975	99,785
Murshidábád	64,182	66,566	54,811	61,526	45,788
Rajshahi Division — Dinagepur	97,078	75,003	87,759	75,158	79,169
Rájsháhí	78,806	51,370	74,494	62,637	75,754
Rangpur	92,436	1,01,780	1,46,161	80,957	1,82,410
Bográ	68,525	59,157	39,964	27,250	43,457
Pabná	42,352	54,949	53,490	29,787	42,625
Darjiling	10,135	30,802	20,303	17,598	11,127
Jalpaguri	45,459	54,552	45,428	46,754	74,041
Eastern Districts.					
Dacca Division — Dacca	79,116	51,814	64,875	70,401	1,01,386
Faridpur	45,515	42,720	42,663	80,280	59,065
Bákarganj	1,04,230	1,04,127	98,919	71,849	76,340
Mymensingh	1,18,305	1,00,820	1,32,785	1,10,729	2,30,984
Chittagong Division — Chittagong	1,02,690	61,067	94,243	79,582	90,557
Noákáli	1,31,445	1,29,714	70,049	60 770	81,993
Tipperah	80,302	54,098	55,785	80,988	1,00,181
Chittagong Hill Tracts	11,016	13,926	9,850	9,398	9,399
BEHAR.					
Patna Division — Patna	2,07,785	1,66 783	1,52,004	1,52,939	97,792
Gaya	2,09,464	1,95,731	1,87,200	2,29,940	3,58,400
Shahábad	1,38,281	1,75,041	1,48,693	1,21,064	1,10,851
Muzaffarpur	1,08,801	1,34,036	1,75,393	1,33,173	1,45,480
Darbhanga	1,50,579	1,63,788	1,21,440	1,35,904	80,336
Saran	1,37,117	1,20 781	1,48 275	1,44,028	1,06,089
Champaran	89,558	1,09,606	62,881	86,008	72,818
Bhagalpur Division — Monghyr	1,63,287	1,34,327	1,70,185	1,30,217	1,00,844
Bhagalpur	1 08,144	1,20,011	1,50,220	1,26,060	1,01,243
Purneah	83,870	77,705	70,631	74,171	76,518
Maldah	29,503	25,875	30,418	32,176	56,302
Santal Parganás	34,792	34,625	57,754	47,133	22,087
ORISSA.					
Orissa Division — Cuttack	41,300	48,060	44,225	48,220	38,060
Puri	28,126	24,372	30,838	30,155	39,597
Balasor	19,415	39,026	40,877	27,619	47,988
CHUTIA NAGPUR					
South-West Frontier Agency.					
Hazaribagh	43,148	41,279	48,468	35,084	27,734
Lohardaga	48,043	33,754	61,720	57,419	57,982
Singbhum	2 502	11,367	14,058	3,494	10,904
Mánbhum	21,960	26,877	28,135	26,078	12,296
Total	36,02,085	36,84,269	36,50,336	33,55,571	37,05,960
Original works	13,37,893	11,91,172	11,07,107	10,62,522	13,80,158
Repairs	17,45,592	18,80,470	18,75,894	16,48,849	16,63,827
Establishment	5,47,504	5,65,403	6,29,704	5,97,782	6,61,476
Tools and plant	3 094	34,017	42,417	37,581	38,979
Toll and ferry establishment and contingencies	8,083	3,297	6,314	8,837	21,520
Total	36,02,085	36,84,269	36,50,336	33,55,571	37,05,960

Buildings.—(1) A dispensary at Galewela.

(2) A female parangi ward at the Dambulla hospital. I repeat the latter proposal which has been suggested since 1892.

(3) A dispensary at Divilla to serve the inhabitants of the Asgiriya valley.

Other Works.—Water supply for Matale town. The only reason which delays the construction of waterworks is the difficulty found by the Engineers in framing a practicable and financially possible scheme.

Works previously suggested within the last Five Years and omitted from the List.—A cart road outlet from Pallegama other than the Elahera route, *i.e.*, over Laggala to Rattota or to Madulkele. This involves crossing a ridge about 4,000 feet in height, and is I think impracticable. The District Road Committee is improving the bridle road over the Laggala gap to Rattota.

Permanent dispensary at Pallegama : This has been abandoned owing to the unhealthy climate of Pallegama and the consequently greater efficiency of a visiting dispenser.

Dewahuwa tank : estimate is Rs. 140,000 ; acreage, 1,100 ; cost per acre, Rs. 127. The scheme has therefore been considered impracticable.

Bowatenna channel : This is being put in order on the upkeep estimate, and the extension of the channel is still under consideration.

Resthouse at Paldeniya : The demand for this appears to have been merely temporary, and limited to persons interested in lands in the vicinity.

Official quarters for the Ratemahatmayas of Matale East and Matale North.

The improvement of the Kaikawala-Kongahawela road : This is a matter still within the scope of the District Road Committee.

F. BOWES,
Assistant Government Agent.

REPORT ON THE NUWARA ELIYA DISTRICT FOR 1907.

Area	363 square miles.	
Population (at last Census) :—		
General	49,539	
Immigrant	99,028	

Revenue.

	Rs.		Rs.
1898	89,023	1903	157,255
1899	65,684	1904	804,474
1900	83,092	1905	297,143
1901	95,291	1906 . ..	127,584
1902	110,422	1907	117,798

The apparent fluctuations of revenue during the last few years are due to the fact that for the whole of 1904 railway collections were paid into the Nuwara Eliya Kachcheri, while in 1903, 1905, and 1906 they were paid in for a short time in each year. In 1907 railway collections paid in only amounted to Rs. 317. This was during the interruption of communication with Kandy, into which Kachcheri these collections were paid for the rest of the year.

Sale of timber shows a decrease of Rs. 7,306. On the other hand, Sale of Forest and Other Produce has increased by Rs. 3,556. Police tax shows an increase of Rs. 7,707, due to recoveries being brought up to date, Sale of Stamps increased by Rs. 2,660. Land Sales decreased by Rs. 973.

Administration.

In April, 1907, the most successful of the Nuwara Eliya Agri-Horticultural Shows of recent years was held.

Dr. Grenier left Nuwara Eliya for England in March ; he had done excellent work during his residence in the station. His place was filled by Dr. Van Twest.

Mr. B. Jayawardena who had held the office of Gravets Mudaliyar and Kachcheri Interpreter for nine years was transferred in December to Matara. He was succeeded by Mr. J. Gooneratne, who has served in the Kachcheri for twenty-one years.

In September His Excellency Sir Henry McCallum arrived in Nuwara Eliya. He was received with an address of welcome.

The long standing question of the Lindula-Agras road reservation was settled, and a clear understanding arrived at as to what land should be considered as belonging to the road and what to the estates.

Condition of the People.

General health was satisfactory. There was marked decrease of malarial fever—attributed by the headmen to the free distribution of quinine. I think too, the year was a naturally healthy one. There were no cases of smallpox ; enteric fever cases were fewer.

Hospital provision in the district is particularly good, but I remain of opinion that the Mulhalkele hospital should be kept open throughout the year.

The installation of the Talawakele water supply was completed. Invert side drains were laid down at Nana-oya and Kandapola. Five new wells were constructed in the district.

There has been a decrease of 67 acres in the area of land under tobacco cultivation, due to low prices obtained. Vegetable cultivation is yearly increasing. The tea industry is in a flourishing condition, and there has been an increase of 225 acres in the area under cultivation. Rice cultivation shows an increase of 40 acres. Paddy and chena crops were satisfactory. Owing to drought at the end of the year fields in Walapane dependent on rain water could not be cultivated, and relief works on a small scale became necessary.

Education.

In Kotmale there are 4 Government and 3 Mission schools; in Uda Hewaheta 4 Government and 5 Mission schools; in Walapane 5 Government and 2 Mission schools. At Nildandahena there is a carpentry school under the supervision of the Ratemahatmaya. It was established in 1906, and it is too soon to gauge its effect. I have however great hope that it will be found beneficial; certainly the children seem keen on learning in it.

Crime.

There is very little crime in the district. There were 3 cases of homicide and 7 knife cases; most of the latter were not serious. There were 17 cattle theft cases, chiefly from Walapane, due, I think, to scarcity of food. Ten house-breaking cases were reported from Kotmale, but the truth of at least half was questionable. There is a good deal of illicit traffic in Kotmale, connived at, I suspect, by the tavern-keepers.

Nuwara Eliya town was free from crime, except thefts by servants, always a bad set here, and except for a daring case of burglary in the public market.

The conduct of the police has been on the whole satisfactory. Some of the rural police, especially the Constable Arachchi of Kandapola, have done good work.

Board of Improvement.

The health of the town was on the whole good. There were 31 cases of enteric fever, of which 10 cases were imported. The opening of the new night soil depôt marks a considerable advance in sanitary matters. A public bathing place was constructed. The surface drainage of the town was continued, and 1,592 feet of invert drains constructed. The old Dharma lines were converted into a set of model dwellings (No. 3). Lack of funds hampers the Board, and I once more repeat the contention that Nuwara Eliya being the sanitarium of the Island should receive exceptional treatment. Much has been done for the improvement of the town, but much remains to be done, and money is required.

Village Communities.

The Gansabhawa roads were maintained in very fair order. Gansabhawa tax was collected as previously with road tax, and in no case was labour performed.

Thoroughfares Ordinance.

The District Road Committee was in its usual impecunious condition. It has rather over 400 miles of bridle roads to maintain, and only little over Rs. 8,000 were available for the purpose. Many of the roads, being on steep hill sides, are peculiarly liable to damage in the rains. All that can be done is to keep the majority of the roads just passable. About one-third only of the adult male population below 55 years pay road tax. The remaining two-thirds are estate coolies, and contribute nothing. Relief labour was utilized for the improvement of some of the Walapane roads. A much needed bridge at Madulla over the Kuda-oya was completed.

Kandyan Marriage Ordinance.

The figures for the last two years are—

	Marriages.	Divorces.
1906	173 ..	39
1907	128 ..	32

As a whole the population is indifferent to the registration of these unions, and it is only by putting periodical pressure on the headmen that registration is secured.

Irrigation.

The condition of several elas in Uda Hewaheta has been improved; the Ratemahatmaya and Irrigation Inspector have been strict in enforcing on the villagers' performance of their obligation to clear the elas and keep them in order.

In Walapane the Bolagandawela-ela was completed under the Ratemahatmaya's supervision, the length being 1½ mile. About 30 acres were asweddumized under it in addition to the area asweddumized in 1906. Before all the land under it can be brought into cultivation, further improvements will have to be effected to the upper part of the ela. The adjoining Moragolle-ela and lands were surveyed with a view to sale and asweddumization in 1908. Sixteen acres of Crown land under the extension of the Lamasuriagama-ela were disposed of, and are being asweddumized.

PUBLIC WORKS.

The following works are required in Nuwara Eliya town :—

(1) Electric light.
(2) Extension of surface road drains.
(3) More model dwellings.
(4) Continuation of road past the building sites of Lady Horton's Walk.
(5) Meat market.

In the District.

(1) Extension of Kurundu-oya road to Ragala.
(2) Cart road from Sangilipalam to Nugawala.
(3) Extension of Deltota road to join the Rahatungoda road.
(4) Extension of Watagoda road to Talawakele.
(5) A light road to connect the Agras with the Nanu-oya road.
(6) Gansabhawa buildings in Kotmale.
(7) New resthouse at Talawakele. I should much like to see the acquisition by Government of the lands in the mountain range above Hanguranketa ; part is forest and should be preserved ; part should in my opinion be re-afforested. I am most anxious too that progress should be made in acquiring the land alienated in the Horton Plains.

Nuwara Eliya Kachcheri,
March 23, 1908.

F. BARTLETT,
Assistant Government Agent.

It was upon a consideration of all these facts that Sir Rivers Thompson appointed a Commission of Enquiry into the working of the Orissa Canal system. It appeared to him that it was only by the personal investigations on the spot of an expert Commission that the real position of things could be ascertained.

The members of the Commission were—

Major C. W. Harrison, R.E., Superintending Engineer, North-Western Provinces.

Colonel J. M. McNeile, R.E., Chief Engineer, Irrigation Branch, Bengal.

Mr R H. Wilson, of the Bengal Civil Service

The members of the Commission assembled at Cuttack, the capital of the province, on the 15th December 1884, and from that date till the end of January 1885 they were engaged in examining witnesses, in inspecting different parts of the canal in the Cuttack and Balasore districts, and in investigating a large number of complaints formulated on behalf of the people in the irrigated tracts by different local associations. The report of the Commission was considered by the Board of Revenue and the Commissioner of Orissa. Sir Rivers Thompson, after the receipt of the reports on the subject, visited different portions of the canals himself, and a conference was held of the chief local Civil and Public Works officers, when the whole subject of the Commission's inquiries, and the connected papers, were brought under discussion, and definite orders passed on each of the questions at issue.

It cannot be contended that the revenue administration of these canals has ever come up to their requirements there were scandals during the time when Sir G Campbell was Lieutenant-Governor; extraordinary divergencies between estimates and actual receipts, and, throughout, continual complaints by the people of oppression and illegal proceedings—much the same sort of complaints as those towards which the inquiries of the recent Commission were directed. At the same time the difficulties of the position were very great The character of the climate of Orissa; the average rainfall, which is quite sufficient in ordinary years for all agricultural purposes; the apathetic and indolent habits of the people; and the hostility exhibited by both cultivators and zamindárs to all canals and distributaries, are elements, in a purely optional system, which make successful administration almost an impossibility. The zamindár, who never remits a pice of his dues, is indifferent whether the raiyat takes water or not; or if he is stirred to any action, it is in the way of discouragement of the practice The raiyat in favourable years avoids all contact with the Irrigation Department, he trusts to good rains, and it is only when these fail him at the last moment that he thinks of seeking for canal water to save his crops It is the common testimony of all concerned in the business that on such occasions there is a general tumultuous rush of raiyats willing to take any amount of water and willing to promise any amount of payment. But as soon as the danger is past, the obligation to pay for the benefits received passes away with it; and the raiyat considers himself perfectly justified in employing every subterfuge (and there are many) to avoid the payment of a single pice.

These are some of the difficult conditions under which the revenue officer has to labour. They are aggravated by almost entire absence of anything

like a proper survey of the country, so that recourse has to be had to detailed measurements of the several areas of land for which water was originally asked, with the result that in almost every case it is discovered that the area has been purposely understated, or the water passed on to lands for which no application had ever been made and no lease granted. It thus happens that a system which from the small amount of the individual demands should, to be successful, be self-acting, involves the deputation of inferior officers given to greed and inclined to be oppressive. As a result, there are complaints of exactions, with litigation and disputes, and, in the end, a long list of arrears. The measures adopted on the Commission's Report will give a partial remedy to these evils, but the substantial fact will remain that, except for a year of such exceptional calamity as 1866, works of this magnitude were not required in Orissa, and that they will never return a reasonable direct percentage upon the enormous expenditure incurred.

When the re-settlement of the province is made in 1897, which Sir Rivers Thompson hopes may be preceded by a detailed cadastral survey of all the districts, an opportunity should be afforded of a much higher assessment of the land revenue, and some partial return in that form for the outlay incurred in the canal system.

The following are the full figures of the financial condition of the canals of these provinces during the period under consideration :—

IRRIGATION AND NAVIGATION.

Productive Public Works, Revenue Account.

The transactions of the major works for the six years ending 1886-87 are shown below —

Revenue.

	1881 82	1882 83.	1883 84.	1884-85	1885-86.	1886-87. Budget
Orissa Canals	2,23,000	3,20,000	2,38,000	1,44,000	2,07,000	2,00,000
Midnapur Canal	2,50,000	2,68,000	2,95,000	2,58,000	2,63,000	2,45,000
Tidal Canal	47,000	45,000	63,000	44 000	52,000	55,000
Son Canals	7,36,000	6,85 909	6,04,000	8,62,000	10 63,000	8,30,000
Total	12,56,000	13,18,000	11,70,000	13,08,000	15,85,000	13,30,000

Expenditure.

	1881-82	1882-83	1883-84.	1884-85	1885-86.	1886-87. Budget
Orissa Canals	3,28,000	3,42,000	2,93,000	3,16,000	3,43,000	3,15,000
Midnapur Canal	2,23,000	2,38,000	2,10,000	2,33,000	2,10,000	2,05,000
Tidal Canal	28,000	40,000	47,000	37,000	40,000	41,000
Son Canals	4,57,000	5,30,000	5,14,000	6,04,000	5,52,000	5,64,000
Total	10,41,000	11,50,000	10,70,000	11,80,000	11,54,000	11,25,000

Net Revenue.

	1881-82.	1882-83.	1883-84.	1884-85.	1885-86.	1886-87 Budget.
Orissa Canals	—1,05,000	—22,000	—55,000	—1,72,000	—1,36,000	—1,15,000
Midnapur Canal	22,000	30,000	48,000	25,000	53,000	40,000
Tidal Canals	19,000	5,000	16,000	7,000	12,000	14,000
Son Canals	2,79,000	1,55,000	90,000	2,58,000	5,11,000	2,66,000
Total	2,15,000	1,68,000	1,00,000	1,28,000	4,31,000	2,05,000

Interest.

1881-82.	1882-83.	1883-84.	1884-85.	1885-86.	1886-87. Budget.
20,75,000	21,16,000	21,61,000	22,13,000	22,07,000	22,69,000

Net charge, including interest.

1881-82.	1882-83.	1883-84.	1884-85.	1885-86.	1886-87. Budget.
18,60,000	19,48,000	20,61,000	20,85,000	18,30,000	20,84,000

Minor Irrigation Works.

Revenue.—The revenue under this head has been as under:—

	1882-83.	1883-84.	1884-85.	1885-86.	1886-87 (Budget).
	Rs.	Rs.	Rs.	Rs.	Rs.
Sáran project	18,000	23,000	9,000	41,000	25,000
Orissa Coast Canal	.....	.....	.....	14,000	15,000
Calcutta and Eastern Canals	5,64,000	5,64,000	5,70,000	4,79,000	5,70,000
Nadiyá rivers	1,83,000	2,03,000	1,95,000	} 1,85,000	2,00,000
Eden Canal	.....	.....	1,000		1,000
Tidal creeks	.....	.....	.....		.....
Agricultural works	3,000	2,000	3,000	3,000	3,000
Civil officers	.....	.....	.....	3,10,000	60,000
Total ...	7,68,000	7,92,000	7,78,000	10,32,000	8,74,000

Expenditure.—The expenditure under this head has been as follows:—

	1882-83.	1883-84.	1884-85.	1885-86.	1886-87.
Capital Account.	Rs.	Rs.	Rs.	Rs.	Rs.
Sáran project	40,000	—4,000	2,000	4,000	.....
Orissa Coast Canal	8,00,000	3,55,000	1,91,000	4,16,000	3,35,000
Calcutta and Eastern Canals	.....	1,52,000	9,000	—43,000	10,000
Total Capital Account ...	8,40,000	5 03,000	2,02,000	3.77.000	3,45,000
Maintenance and repairs of the above ..	34,000	2,44,000	3,03,000	2,39,000	2,30,000
Irrigation and Navigation works for which neither Capital nor Revenue accounts are kept	13,50,000	2,44,000	1,51,000	1,27,000	1,55,000
Agricultural works	1,43,000	1,87,000	1,60,000	3,20,000	1,12,000
Unallotted grant	.....	.....	.....	.....	85,000
Total ...	23,67,000	11,78,000	8,16,000	10.63,000	9,27,000

Statement showing the total expenditure on Imperial Agricultural works in Bengal from 1884-85 *to* 1886-87, *as exhibited in the Finance and Administrative Accounts.*

Years.	New works.	Repairs.	Establishment.	Tools and plant.	Profit and loss.	Suspense.	Total.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1884-85	2.09,718	3,42,927	1,18,668	11,396	*Nil*	+7,692	6,90,401
1885-86	1,34,744	3,27,601	88.230	5,507	*Nil*	—12,838	5,42,744
1886-87 (*a*)	1,75,000	3,55,000	1,12,700	13,300	. ....	.....	6,56,000

(*a*) The division between new works, repairs, &c., is an estimate only.

RAILWAYS.

In the boundaries of the Province there has been an increase in open railway mileage of 522¼ miles, or about 104 miles on the average in each of the five years. The details of the increase will be found in the following table, which shows that about three-fifths of it has occurred upon the State lines and the remaining two-fifths on the assisted lines. The duty of completing the greater portion of the extension of the State lines was left to Sir Rivers Thompson as a legacy by his predecessors; and the wisdom of their policy has been shown on the whole to have been justified by the increase of provincial revenue which has accrued:—

Railway	April 1882	April 1887	Increase of mileage
	Miles.	Miles.	Miles.
East Indian	729	738¼	9¼
Patná-Gayá	57	57	
Tárakeswar		22	22
Eastern Bengal	202	234	4
Calcutta and South-Eastern	28		
Bengal Central	20¼	125½	104¾
Dacca		85½	85½
Northern Bengal	243	249	6
Tirhút	85	246	161
Bengal and North-Western	..	92¾	92¾
Dárjiling-Himalayan	50	50¾	¾
Deogarh	5½	4	—1½
Naihátí	27	27	..
Assam-Behar	..	38	38
Total	1,447½	1,969½	522¼

The following extensions of the railway system are under construction, and are expected to be completed by the end of 1887-88:—

	Miles
Assam-Behar State Railway	69
Extension of Tirhút State Railway ...	13
Total	82

Besides this, a further 48½ miles of the Assam-Behar and 14 miles of the Tirhút Extension have been sanctioned by the Secretary of State; but pending the confirmation of the evidence upon which their construction was originally recommended, the commencement of work upon them has been deferred.

The manner in which these extensions have affected the means of communication throughout the Province may be sketched as follows:—

A branch of the East Indian Railway has been opened from Bánkípur to the bank of the Ganges at Dígha Ghát. The Húglí river has been crossed at Naihátí by a bridge, the importance of which as an engineering work is comparable with anything else of the sort which has hitherto been attempted in India. The bank of the Húglí, upon which Calcutta and its wharves are situated, has been placed in direct railway communication with that part of India from which its principal export produce is derived. An enterprising

Joint-Stock Company has connected Tárakeswar, an ancient place of Hindu pilgrimage, with the railway system of India. Diamond Harbour, which may be considered as the actual mouth of the Húglí, has been connected with Calcutta by a branch of the Calcutta and South-Eastern Railway. An entirely new line has been constructed, connecting Náráinganj, Dacca, and Maimansingh. A swift daily steamer now runs between Náráinganj and Goálándo on the Eastern Bengal State Railway, and the chief districts of Eastern Bengal are thus placed in close communication with Calcutta. The densely-peopled districts of Central Bengal (Jessor and Khúlná, with a connected steamer service to Bákarganj) have also been brought into railway communication with Calcutta by the enterprise of a Joint-Stock Company. The Assam coolie traffic has been greatly facilitated by the construction of the Káuniyá-Dharlá line, which shortens by several days a tiresome and often deadly river journey for this helpless class of emigrants. The Tirhút system has been extended in three directions throughout the exceptionally populous districts of Darbhangá and Champáran, and is also immediately connected by a magnificent bridge over the river Gandak with the metre gauge system of railways which during the same five-year period has been constructed by the Bengal and North-Western Railway Company. The latter runs for a distance of between three and four hundred miles through populous and prosperous districts in the North-Western Provinces and Oudh down to Sonpur in Bengal, where all this newly-developed traffic is delivered on to the East Indian Railway by a ferry over the Ganges. The Assam-Behar system is an extension of the Northern Bengal system of metre gauge railways into the Purnah and Dinájpur districts, and will, when completed, bring Behar and Western Bengal into direct communication *viâ* Sáhibganj on the East Indian Railway with Dárjíling and Assam.

Of the railways which have been enumerated as lying within the boundaries of Bengal, only a limited number are of direct financial interest to the Province. The Bengal Central, Bengal and North-Western, Tárakeswar, Dárjíling-Himalayan, and Deogarh lines are the property of limited liability companies, and with the exception that a free gift of the land which they have required has been granted to the three latter at the cost of Provincial revenues, the Province is not directly financially concerned in any of them. The East Indian Railway is the property of the Imperial Government, and is worked through the agency of a company. The Eastern Bengal Railway lapsed to the Government of India in 1884, having previously been the property of a company. The Calcutta and South-Eastern, which was previously a provincial line, was at the same time ceded to the Government of India, who since then have worked both this and the Eastern Bengal and the Company's Bengal Central lines through departmental agency. From the 1st of April 1887, however, the control and working of the Eastern Bengal State Railway and Calcutta and South-Eastern Railway, which are now considered as one line, will be placed in the hands of the Government of Bengal. The Patná-Gayá Railway, which, though a provincial line, has hitherto been worked through the agency of the East Indian Railway Company, will on the same date be given up by the Province to the Government of India. All the other lines named in the list are Provincial, in this sense that the revenues of the Province are held liable for payment of the annual interest upon their capital cost, and at the same time all their working expenses and gross earnings come into the Provincial balance sheet.

The following table exhibits the progress which during the five years of Sir Rivers Thompson's administration has been made in the financial development of the Provincial railways:—

Head of Account.	1881-82.	1882-83.	1883-84.	1884-85.	1885-86.	1886-87 (estimated).
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Gross receipts ..	32,70,000	37,88,000	41,24,000	43,10,000	45,03,000	50,49,000
Working expenses ...	19,03,000	20,40,000	25,00,000	30,72,000	30,98,000	32,88,000
Net earnings ...	13,67,000	17,48,000	16,24,000	12,38,000	14,05,000	17,61,000

That the net revenues have not kept pace with the steady increase in gross earnings is ascribable to the rapid progress of new extensions, which require the lapse of a reasonable period for their proper development. The interest charges, for which the Province is liable on account of the capital which has been sunk in the Provincial railways, have risen to over 19 lákhs in 1886-87 as compared with about 12¾ lákhs in 1881-82. There is every reason to look forward to the period when, upon the completion of the extensions which are now under construction, the earnings of her railways will form one of the most important sources of Provincial income.

By far the larger share of the cost of the Bengal Provincial railways has been incurred out of borrowed capital for which interest is payable. A small proportion of the annual expenditure upon the several lines has usually been provided from Provincial savings. The gross expenditure, Imperial and Provincial, which had been incurred upon the lines, projects, surveys, &c, which were provincial at the time of Sir Rivers Thompson's accession to office at the beginning of 1882-83, was 430 lákhs. The corresponding figures at the end of each of the five years until the close of his administration have been 484, 549, 509, 582, and 601 lákhs, the drop in the third year being ascribable to the transfer of the Calcutta and South-Eastern Railway to the Government of India. The interest which has been paid by the Province during each of the five years has been 14½, 16, 17½, 19, and 20¾ lákhs, while the share of the entire expenditure which has been provided from Provincial savings has been 18½, 8½, 1¾, 1, and ¾ lákhs. During the first two years funds were provided, though with difficulty, from Provincial Revenues for the Dinájpur branch of the Northern Bengal State Railway, and for the completion of the Diamond Harbour branch of the Calcutta and South-Eastern Railway, the whole cost of which has been found from Provincial revenues. With the completion of these works the construction of railways from Provincial funds has been entirely suspended, the small sums shown in 1884-85 and subsequent years being merely on account of the Káuniyá-Dharlá State Railway, which is a Provincial work, and of the Railway establishment of the Bengal Secretariat.

IMPERIAL FINANCE.

Although the Local Government is not directly interested in the details of Imperial finance, still a brief notice of the working of some of the major heads of Imperial accounts, with which the Government of the Lower Provinces is in directly connected, will be found of interest. These heads are Customs, Opium, and Salt, together with which the subjects of Telegraphs and Post Offices can be conveniently grouped.

The question of the Provincial financial contract of 1882, between this Government and the Supreme Government of India, will be found dealt with under the head of Provincial Finance, and is not touched upon.

In connection with the general Imperial financial system, as it affects these Provinces, two subjects may be mentioned here.

In the course of the year 1882-83 an attempt was made to place within the reach of the poorer classes a safe and ready form of investment by the issue of stock-notes. These notes, which bear interest at the rate of 4 per cent., and are transferable from hand to hand without endorsement, but are not legal tender nor convertible at sight, were at first offered to the public for sale through the civil treasuries. Subsequently the agency of the Post Office was employed, but hitherto the notes have not met with any popularity. In fact the scheme has been a failure, so far as these Provinces are concerned.

Another important change was the introduction of Post Office Savings Banks early in the same year. During the whole of the period under review this system has been steadily increasing in popularity. Just before the opening of the Post Office Savings Banks in 1882-83, there were 20,155 depositors in the District Savings Banks with a balance to their credit of Rs 61,54,476, whereas at the end of 1885-86, the total number of depositors in both classes of banks was 63,803, with a balance to their credit of Rs. 1,03,89,280. The increase was entirely in the case of Post Office Savings Banks, in 1885-86 alone, the number of depositors in District Savings Banks having diminished more than half.

CUSTOMS.

The receipts from customs are almost entirely Imperial, the Provincial revenues only benefiting by the miscellaneous receipts, which average about Rs. 60,000. On the other hand, the whole of the expenditure under this head has been borne by the Provincial Government. This expenditure has been as follows :—

	Rs.
1882-83	5,58,000
1883-84	4,86,000
1884-85	4,98,000
1885-86	4,86,000
1886-87 (estimated)	4,98,000

By the Indian Tariff Act of 1882, which came into force a few days before the commencement of the period under review, the customs duties were remitted on all articles imported into British India except arms and ammunition, liquors, opium, and salt. The result of the reform, coupled with the effect of the reduction of the duty on salt, was a heavy fall, amounting to 34 per cent., in the receipts of the Customs Department. The net duty in 1882-83 amounted to Rs. 2,06,51,000, which was less by Rs. 1,08,75,000 than the receipts in the previous year. The abolition of the import duties rendered it possible to effect extensive reductions in the establishment of the Calcutta Custom House, and the charges of the department only amounted to Rs. 5,81,000 in 1882-83, as

compared with Rs. 7,24,000 in the previous year. These charges fell still more in 1883-84, and since then have not varied to any particular degree. In 1883-84 the net customs duty showed a small decline of ·7 per cent. In the following year they increased by 6·4 per cent., and again in 1885-86 by 6·4 per cent. The improvement in the last two years was due to large clearances of salt. Owing to bad seasons there was a diminished export of rice in 1883-84 and 1884-85, and this seriously affected the export duties, but in 1885 the rice trade recovered from its previous depression, and the export duties rose by 13·5 per cent.

OPIUM.

Although the administration of the Opium Department in the Behar and Benares Agencies is in the hands of the Provincial Government, the financial head of opium is one of those in the revenue and expenditure of which the Local Government has no share.

As the administrative opium year commences with the 1st of October and ends with the last day of September in the following calendar year, the present review will deal with the following periods:—

The opium year—

1881-82
1882-83
1883-84
1884-85
1885-86,

and the period from the 1st October 1886 up to the time of writing.

The following table shows the area under cultivation and the production of opium at 70° consistency in each of the above complete years.—

Opium year.	Net area under cultivation Bighas	Production at 70° consistency Maunds
1881-82	850,000	1,00,890
1882-83	793,000	69,290
1883-84	809,000	1,27,400
1884-85 ..	904,000	1,33,800
1885-86 ...	947,000	1,21,500

The net area under cultivation in 1881-82 showed a decrease of 8,000 bighas on that of the previous year. This was due to a large decrease in cultivation in the Benares Agency, the Behar Agency having increased its cultivation by nearly 26,000 bighas. The outturn in the same year, however, showed an improvement of 6,091 maunds, the bulk of which was contributed by the Benares Agency. The opium season of 1882-83 was the most unfavourable that had been known for many years. The season began with favourable prospects, but in January and the succeeding months there was in both Agencies a widespread destruction, caused chiefly by blight. The unirrigated north Gangetic districts suffered most, good crops being obtained only from the two districts of Hazáríbágh and Monghyr. It was at first expected that the crop of 1883-84 would again be a short one, but in the end it turned out unusually good. The rainfall was, it is true, deficient, but its place was supplied

by well irrigation, while the dryness of the season appears to have favoured the vigour of the plant and the yield and consistence of the drug. In the Behar Agency, though the area engaged for cultivation was considerably diminished, there was an increase in net cultivated area of 5,000 bighas, and in produce of 32,486 maunds. More than half the area under cultivation in this Agency was to the south of the Ganges, a tract of country well irrigated, while 43 per cent. of the area north of the Ganges was unirrigated. In 1884-85, although the rainfall was deficient in most of the districts of the Behar Agency, the net area of cultivation and the net produce were larger than in any previous year. The increase of produce was entirely in the Benares Agency, there being a decrease of nearly 3,760 maunds in Behar. In 1885-86 the extraordinary outturn of the previous two seasons had put the cultivators into good heart, and made them anxious to extend the cultivation. The area actually cultivated showed a large increase, but the net produce, though still large, was not quite up to the high figures of the two preceding years. This decrease was entirely in the Benares Agency, where the crop was affected by unfavourable weather. In Behar the season was an exceptionally favourable one, and there was a large increase in the produce.

In consequence of the failure of the crop in 1882-83 the outstanding balances of advances to cultivators were very heavy, amounting at the close of the year in the Behar Agency alone to Rs. 2,40,000. No attempt was made to collect this large sum until the prospect of a bumper crop in the following year became certain, when it was reduced to Rs 8,205. At the end of 1884-85 the total outstanding balance was Rs. 26,750, and at the end of 1885-86 Rs 24,432. These sums are relatively small when compared with the 270 lákhs, more or less, which were advanced.

In the opium year 1881-82 an important experiment was made under the authority of the Government of India by purchasing in Central India 2,000 maunds of Málwá opium for manufacture in the Government factories as excise opium. By this means it was hoped that a larger amount of the Bengal drug would be set free for the manufacture of provision opium At first it was found that the custom of the Málwá cultivators of mixing oil with the opium imparted a flavour to the drug which rendered it unpopular in Northern India, although it was said to be generally appreciated in the Central Provinces. In his report for 1885-86 the Benares Agent stated that the complaints in the North-Western Provinces appeared to be gradually dying out. The opium received from Málwá was now more free from oil than before, and where the oil was found mixed with it, the admixture was far less than it used to be. At the same time the experience of the factory officials in preparing the drug and in extracting the oil for excise consumers had much extended, and the regular diminution in the number of complaints regarding it showed, the Agent thought, that the prejudice which at first existed against its use was rapidly disappearing. Since then, however, on account of the successful outturn of the past few seasons, in the agencies, the purchase of Málwá opium for excise purposes has for the present been suspended.

In the year 1881 82 it was reported that the development of communications throughout Behar had rendered it possible to bring the more bulky kinds of farm produce, such as potatoes, sugarcane, and tobacco, to market at a price which rendered them formidable rivals to poppy. This matter was

investigated by the Opium Commission, who arrived at the conclusion that as these three were the only crops which seriously competed with poppy, and tobacco and sugarcane were less profitable than opium, while potatoes commanded only a small market, there was no cause for alarm.

Large sums have been annually advanced by Government for the construction of wells for irrigation, and great numbers of them have been constructed and repaired. It has been proved that well-water is decidedly more favourable to the growth of poppy than canal-water, and the cultivators have been allowed to construct aqueducts across canal distributaries for the purpose of conveying well-water to their fields, the cost of the shoots and aqueducts being borne by Government. As much as Rs. 1,38,000 were advanced or spent by Government in the opium year 1884-85 on wells and aqueducts. A new scheme of damming up hill streams in certain districts, in order to be able to distribute their water by means of small channels, has been referred to the Director of the Agricultural Department for consideration.

The following table shows the sales of provision opium during the financial years of the period under review:—

Year.	Number of chests	Average price per chest
		Rs
1882-83	56,400	1,222
1883-84	54,400	1,250
1884-85	46,698	1,295
1885-86 (approximate)	50,997	1,234
1886-87 (estimated approximate) . .	54,250	1,131

The following shows the total receipts of all kinds from opium, the charges, and the net revenue:—

Financial Year	Total receipts of all kinds	Charges	Net revenue
	Rs	Rs	Rs
1882-83 ...	6,95 77,629	2,28,12,515	4 67,65,114
1883-84 .. .	6,90,82,584	1,85,10,238	5,05,72,346
1884-85	6,13,96,936	2,95 96,258	3,18,00,678
1885-86 (approximate)	6,35,76,739	3,05,08,885	3,30,67,854
1886-87 (estimate)	6,70,67,000	2,80,38,000	3,40,29,000

At the beginning of 1883 a Commission appointed by the Government of India made a thorough inquiry into the working of the Opium Department in Bengal and the North-Western Provinces. The Commission submitted at the end of the same year an exhaustive report dealing with every detail of the administration of the Department. They found that the reforms chiefly needed were of an executive and not of a legislative character. Their recommendations have been considered by the Board of Revenue, by the Lieutenant-Governor, and by the Government of India, and while effect has been given to some of them, adoption of others has had to be postponed for a time on account of the expense involved. One of the important recommendations made by the Commission, to the effect that the control of the Department, which now extends its operation beyond Bengal both in the North-Western Provinces and the Punjab, should be transferred from the hands of the Bengal Government to a Director-General, under the direct orders of the Government of India, was negatived by the Secretary of State.

SALT.

Under the Provincial contract of 1882 all the receipts from salt revenue, excepting minor items, which amount annually to only a lákh or a lákh and a half of rupees, are Imperial. On the expenditure side the cost of the purchase and manufacture of salt, and of preventive lines and operations, are Imperial, and the rest of the expenditure Provincial. The Provincial expenditure is only about Rs. 20,000 per annum.

On the 10th March 1882, *i.e.*, a few days before the beginning of the period under review, the duty on salt, which was at that time Rs. 2-14 per maund on imported salt and Rs. 2-8 to Rs. 2-12 on salt manufactured in Orissa or the 24-Párganas, was, in furtherance of the established policy of the Government of India, reduced throughout these Provinces to a uniform rate of Rs. 2 per maund. This reduction, together with the rumours by which the actual change was preceded, had produced some effect on the imports and clearances of salt during 1881-82. The change, however, produced its full effect throughout the following years.

The following table shows the amount of salt imported, locally manufactured, and passed into consumption since 1881-82 —

Year	Amount of salt imported.	Amount locally manufactured	Amount passed into consumption
	Mds.	Mds	Mds
1881-82	90,04,000	4,76,000	91,61,000
1882 83	84 46 000	2,88 000	95,46 000
1883 84	91 63,000	6 38,000	94,64 000
1884-85	96 24 000	4,26,000	1,04,00,000
1885-86	89,54,000	4,47,000	99,12,000

The following table shows the financial results of the Department during the same period —

Year	Receipts	Charges	Net revenue
	Rs.	Rs	Rs
1881-82	2,48,36,000	3,12,000	2,45 24,000
1882 83	1,83,65,000	3, 38,000	1,80 27,000
1883-84	1,28,98 000	2 50,000	1 80,48 000
1884-85	2,03,27,000	2,71 000	2,00,56,000
1885-86	1,90,97,000	2,12,000	1,88,55,000

It will be seen from the above that the immediate result of the reduction of duty was a decrease both in importation and in local manufacture, while the quantity of salt passed into consumption showed a small increase of about 4 per cent. In the following year (1883-84) there was a rise both in the quantity imported and in that manufactured, though the quantity passed into consumption showed a slight decrease. The increase in the quantity of salt manufactured was due to favourable weather, the season having been particularly dry. Since

then the manufacture of excise salt has declined. It is now manufactured only in Orissa, where the sales have steadily decreased. This fall has probably been caused by an illicit trade carried on in the Cuttack district, and the Salt Department in that Province has lately been transferred to the control of the Commissioner of Salt Revenue, Madras, in the hope that the trained supervision to which operations are now subjected will stamp out illicit dealings. The increase in imported salt in 1883-84 was attributed to slow trade and low freight. In the following year there was a considerable increase in the importations at Chittagong, which is gradually becoming established as the port from which Eastern Bengal draws its salt.

After the reduction of the duty the revenue decreased by 26 per cent., while the expenditure increased by 8 5 per cent. In 1883-84 there was a still further decrease in the receipts by 3 per cent., but this was more than counterbalanced by a decrease of 27·7 per cent. in the charges. The year 1884-85 was the third throughout which the uniform duty of Rs. 2 per maund was levied, and the first in which there was an increase in actual receipts. The increase in charges this year was due to larger refunds of customs duty. The following year again showed a decrease in net revenue.

The principal places from which salt was imported were the United Kingdom, Hamburg, Bombay, the Arabian and Persian Gulfs, Italy, Port Augustus, the United States, Saigon, Madras, and Akyab. An attempt was made during 1883-84 to establish a trade in Sardinian salt from the Mediterranean ports, but it was abandoned in the following year.

TELEGRAPH & POST OFFICES.

There has been a steady development of both telegraphic and post-office business during the period under review. Among the more important extensions of the telegraphic system may be mentioned the lines between Nattor and Rámpur Beauleah, and between Sultánpur and Serájganj. The important station of Barisál has also been placed in telegraphic communication with the rest of the Province by a line connecting it with Khúlná. All post officers were authorised from 1st December 1883 to receive telegrams from the public for transmission to the nearest telegraph office, and measures were at the same time taken to open combined post and telegraph offices in places where a separate telegraph office would either be unnecessary or unremunerative. At the end of the year 1885-86 there were a hundred of these combined offices open. Excluding railway signal offices, the total number of telegraph offices in the Province is now 137, as compared with 58 on the 1st April 1882. In 1882 there were 19 districts without a telegraph office at their head-quarters, whereas the number of head-quarter stations thus cut off from telegraphic communication is now only 6 in the whole Province. Postal clerks have been trained for telegraph work, and it has been found feasible to work both the telegraph and post office in the same building at a very slight extra charge.

The postal system has also greatly developed. At the end of the year 1881-82 there were 1,588 post offices in the Province, and the length of postal lines, zamindárí and Imperial, was 22,099 miles. At the end of 1885-86 the corresponding figures were 2,104 and 24,196. The number of articles of all kinds received

for delivery during 1881-82 was nearly 38½ millions, while during 1885-86 it was over 55 millions. Two important additions were made to the functions of the Postal Department in 1882-83. These were the introduction of post office savings banks and the extension of the value-payable system to registered letters. British postal orders of the values of 1*s.* to 20*s.* and telegraphic money-orders were introduced from October 1884, and in the same year the benefits of the money-order system were greatly extended by the Postal Department making payments at the houses of the payees instead of compelling them to go to the post office. From the 1st October 1885 the value-payable system was extended to unregistered book packets, and in January 1886 the system was further extended and made applicable to goods sent by railway, the railway receipts alone being sent through the post office. From October 1886 the experiment has been tried of allowing land revenue to be sent to the Collector by money-order instead of insisting upon payment at the district treasury; and, so far, this system, which was introduced in ten districts, has been thoroughly successful, and appears to be much appreciated. It will be extended now to other districts, and eventually the prospect is held out of rent payments coming under the same system.

The progress of the postal savings banks and the money-order department has been very marked. The number of accounts in the post office savings banks open at the close of the year 1882-83, was 12,247 of a total value of Rs. 11,11,564. At the end of 1885-86 the corresponding figures were 45,361 and Rs. 59,88,000. The transfer of the district savings bank to the post office, which took place towards the close of the latter year, contributed in a large measure to the increase in the number and value of transactions. The number of money-order transactions in the Province has risen from 1,297,000 in 1881-82 to 2,994,000 in 1885-86, and the aggregate value of the transactions from Rs. 3,31,57,000 to Rs. 5,89,84,000 The number of articles sent through the value-payable post has more than doubled in the past three years, and in the year 1885-86 above twenty-one and a half-lákhs of rupees were recovered from the addressees of value-payable articles and paid to tradesmen in Calcutta through the post office.

The post office and telegraph are heads of revenue and expenditure in which, under the financial contract of 1882, the Local Government has no share The district post is, however, local. The Provincial Government is required to guarantee a certain revenue on postal and telegraph lines specially constructed on its behalf, and also shares in the earnings of such lines, but these items are quite insignificant.

PROVINCIAL FINANCE.

The Provincial financial contract with the Government of India of 1882 was in force for the five years 1882-83 to 1886-87, and its term practically coincided with Sir Rivers Thompson's tenure of office as Lieutenant-Governor of Bengal. The previous contract of 1877 may be described as falling naturally into three parts (1) In respect of the branches of service which had been provincialised by Lord Mayo, the old principle was retained; a fixed annual grant was made from Imperial revenues, which, together with the receipts of those departments, was expected to cover their expenditure, any growth of

charges being provided for from the increase in the receipts. (2) In respect of the civil heads of revenue and expenditure now provincialised for the first time, a separate contract was made for each head of revenue and for each head of expenditure; the rates of increase in the payments on account of the revenue from Excise, Stamps, and Law and Justice being advisedly taken at a low figure, so as to leave the local Government a margin wherewith to meet the normal growth of civil expenditure for which no direct allowance was made. (3) In respect of public works constructed from borrowed capital, the Lieutenant-Governor was authorised to resort to local taxation to make good the deficit of interest charges in excess of net earnings.

The contract which came into force in 1882 differed materially from that which it succeeded. The principles on which it proceeded, in common with the contracts for all other Provinces in India, were first announced by the Imperial Government in the Resolution of the Finance and Commerce Department, No. 3353, dated the 30th September 1881. They have been summarised thus:—

"Instead of giving the local Government a fixed sum of money to make good any excess of provincialised expenditure over provincialised receipts, a certain proportion of the Imperial revenue was devoted to this object. A few heads were reserved as Imperial; others were divided in proportions, for the most part equal, between Imperial and Provincial; the rest were made Provincial. The balance of transfers, being against the local Government, was rectified by a fixed percentage on its Land Revenue otherwise reserved as Imperial. At the same time a distinct declaration was made of the policy to be followed during the term of the contract. The Imperial Government was to make no demand on the local Government except in the case of disaster so abnormal as to exhaust the Imperial reserves and resources and to necessitate a suspension of the entire machinery of public improvement throughout the Empire. On the other hand, the local Government was to look for no special aid from the Imperial Government except in the case of severe famine, and then only within the following limits.—(1) current income must have been exhausted, every avoidable expense in every department having been retrenched, and the public works grants having been applied to famine work to the very utmost possible; (2) savings of past years in excess of the ordinary working balance must have been drawn up to two-thirds of their total amount; (3) the margin of Provincial surplus in normal years will be liable for the completion of works begun as relief works, and where there is no need of such completion, will be chargeable up to one-fourth at most for payment of interest on any Imperial loans which may have been raised to meet the excess cost of the famine in general.

"The following were the principal additions made to the provincial receipts and charges under the new scheme:—This Government was admitted to a half share in the receipts from Forests and Assessed Taxes, and took all the receipts under the heads of Superannuations, Miscellaneous, and Other Public Works, except contributions from the military and medical funds; gain by exchange on Imperial transactions; premium on bills and unclaimed bills of exchange; receipts from military works; and any unspecified miscellaneous receipts exceeding Rs. 10,000. Under Forests and Assessed Taxes

it was liable for half the charges. The Imperial Government only retained under Land Revenue the same percentage on charges for collection and on the cost of surveys and settlements as were retained of land revenue. To the present provincial charges was added under Law and Justice and Medical all that was reserved as Imperial; under Stationery and Printing all except the cost of stationery purchased from central stores; and under Other Public Works, the charges for Museums, Educational Buildings, and Light-houses. On the other hand, one-half the net receipts from Excise, Stamps, and Registration, including record-room fees, was surrendered to the Imperial Government. The percentage of Land Revenue was, however, only calculated after allowing for the claim of the Government of India to share in the general improvement that had resulted to the Provincial revenue during the five years then just expired. That share was fixed at 30 lákhs a year. From this the Government of India deducted 3 lákhs to be expended on the improvement of the Subordinate Executive and Judicial Services and the establishment of the new district of Khulná. In order, too, that the local Government might not be embarrassed by a sudden reduction of 27 lákhs in its income, His Excellency the Governor-General in Council added a sum of 28½ lákhs to the credit balance of the Province for 1881-82.

"The amount of percentage of Land Revenue which under the new scheme was assigned to this Government was calculated, as stated above, upon the basis of the regular estimate for the year 1881-82. It was fixed at 32·2284. A sum of Rs. 30,00,000 was, on account of the annual contribution to the Government of India, added to the Provincial balance, provision being at the same time made for an additional expenditure of three lákhs for the improvement of the Subordinate Civil Service and for a new district of Khulná."

From this it will be seen that the chief points in which the contract of 1882 differed from that of 1877 were the following.—

First.—The excess of provincialised expenditure over provincialised receipts is balanced, not by an annual allotment of fixed amount, but by a fixed percentage of the land revenue of the Province.

Secondly.—The local Government is no longer permitted to appropriate the whole of the increase in the three principal sources of improvable revenue, viz. excise, stamps, and registration. Under the old contract the local Government surrendered fixed sums under excise and stamps, and nothing under registration, while now one-half the receipts (including one-half of the profits) under all these heads goes to the Government of India.

Thirdly.—In the new contract the local Government gained an interest in the revenue heads of assessed taxes and forests, and other less important heads of service.

Fourthly.—The contract of 1882 is a *consolidated* contract. In other words, no attempt was made to estimate the future receipts and expenditure under separate heads, and to fix distinct assignments for each. The new arrangements were applied to the revised estimates for 1881-82 as a whole; the total receipts were

compared with the total expenditure, and (after making a deduction of 27 lákhs from the revenue side being the share of the profit on the old contract which the Imperial Government decided to appropriate) the adjusting percentage of land revenue was calculated so as to balance the account.

The general financial result of the contract of 1882 may be summarised thus—the revenue, which was estimated at Rs. 3,93,11,000, has averaged Rs. 4,19,58,000, giving an increase of Rs. 26,47,000; the expenditure, which was estimated at Rs. 4,48,53,000, has averaged only Rs. 4,31,27,000, being a reduction of Rs. 17,26,000; and the deficit, which averaged Rs. 11,69,000, has been met by drawing upon the accumulated balances of the Province to the extent of Rs. 58,49,000. The chief branches of revenue which have contributed to the increase in receipts are—stamps, provincial rates, and registration, while the reduction in expenditure has been almost wholly confined to the Public Works Department, in which the grants for civil works, for capital expenditure on railways and canals, and for irrigation (net charges), have been cut down so as not merely to balance the account, but to provide for a large increase of expenditure on revenue establishments, judicial courts, jails, police, education, superannuation, and the net charges of provincial State Railways. The current year is expected to close with a credit balance in the Imperial treasury of only Rs. 16,94,000.

The following financial heads will now be treated in detail, viz. Land Revenue, Stamps, Excise, Provincial Rates (that is to say, the Public Works Cess), and Assessed Taxes.

The financial aspects of other heads of expenditure will be found elsewhere dealt with under their appropriate sections:—

LAND REVENUE.

The number of permanently-settled estates borne on the revenue-roll in 1882-83 was 142,929, which rose to 147,008 in 1885-86. This increase was principally due to the action of the batwárá law, under which estates the property of joint-proprietors became subject to partition. During the period under review the Government has repeatedly enjoined a policy of leniency on officers entrusted with the working of the law of sale for arrears of revenue. Practical effect has been given to this policy, as will be evident from the fact that in 1882-83, 2,148 estates were brought to sale, while in 1885-86 the number sunk to 1,770, and these were for the most part cases in which owners voluntarily fell into arrears to procure the sale of their estates, because, either from diluvion or other causes, they were unable any longer to bear the revenue permanently assessed upon them, or because they wished to void encumbrances.

The vast majority of estates in Bengal are permanently settled. In 1885-86, out of 157,746 estates of all kinds, with an area of 138,791·5 square miles 147,008, with an area of 118,431·7 square miles, were permanently settled; only 7,764, with an area of 10,365·5 square miles, were temporarily settled; 2,950, with an approximate area of 5,420·6 square miles, were Government estates; and there were only 24 raiyatwárí tracts, with an approximate

area of 4,575·7 square miles. The relative proportions of these areas to each other will be manifest from the accompanying diagram :—

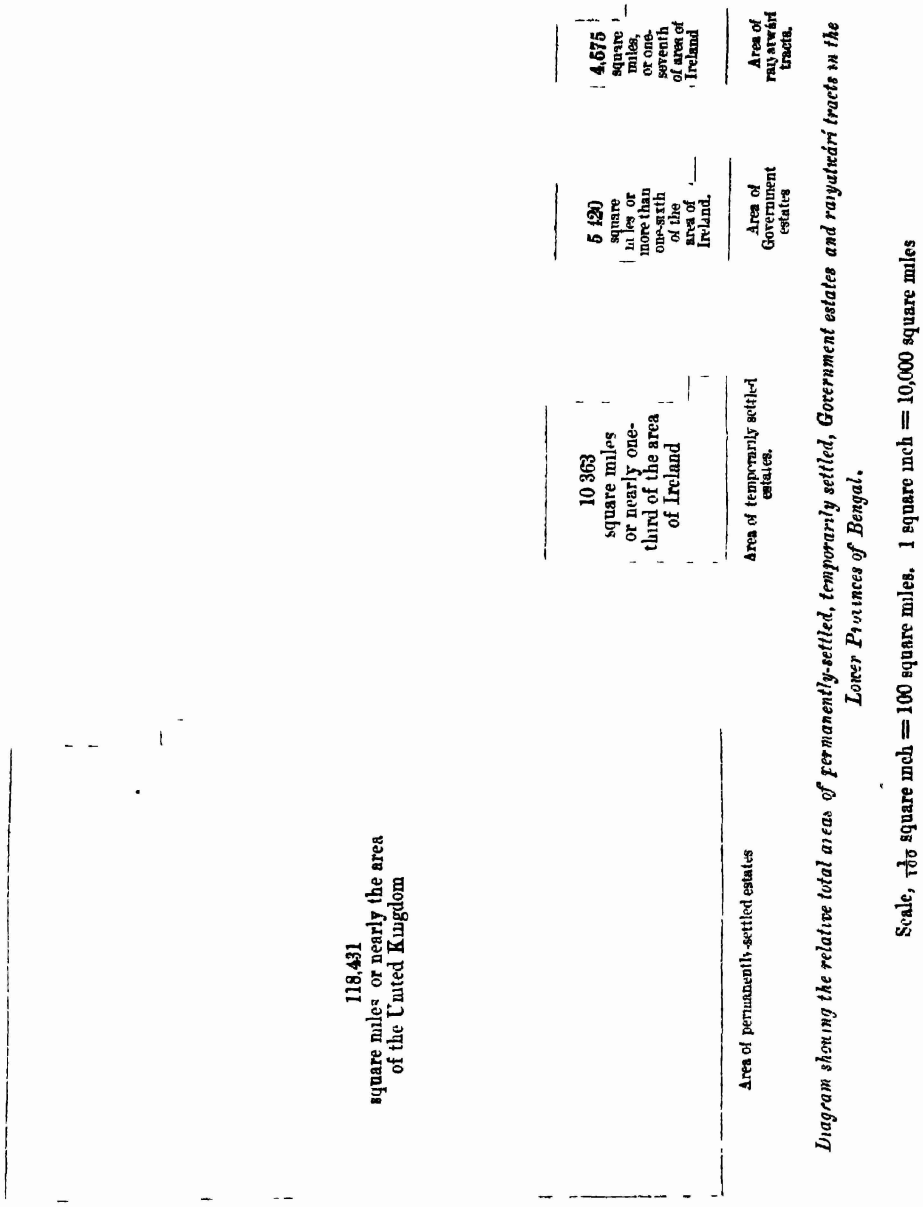


Diagram showing the relative total areas of permanently-settled, temporarily settled, Government estates and ryotwárí tracts in the Lower Provinces of Bengal.

Scale, $\frac{1}{100}$ square inch = 100 square miles. 1 square inch = 10,000 square miles

According to the provincial contract now coming to a close, the 32·2284 per cent. of the whole amount of land revenue is retained by the Provincial Government; the rest (67·7716) goes to the Supreme Government. Taking land revenue proper after eliminating all adjustments, we find that the contract estimate of the provincial share of the receipts was taken at Rs. 1,21,34,000, and that the actuals in each year have been—

	Rs.
1882-83 ...	1,22,28,000
1883-84 . . .	1,22,20,000
1884-85	1,20,60,000
1885-86	1,22,98,000
Estimated for 1886-87	1,23,17,000

When it is remembered how small a part of Bengal is temporarily settled, and that 1884-85 and 1885-86 were years of unfavourable harvests, the improvement in this branch of the revenue is satisfactory. The large falling off in 1884-85 was mainly due to non-payment from the Bardwán Ráj estate, brought under the Court of Wards at the close of the year, and the corresponding increase in 1885-86 was due to the recovery of the arrears in that estate.

The total amount of land revenue proper to be collected in Bengal during 1886-87 is Rs. 3,82,18,000, which represents less than Rs. 55 per hundred of the population. The corresponding rates per hundred of the population in each of the other chief provinces are:—Bombay, Rs. 234; Madras, Rs. 134; North-Western Provinces, Rs. 129; and Panjáb, Rs. 109. These figures show how very lightly, so far as the Government is concerned, the land is taxed in Bengal in comparison with the other parts of India. This is illustrated by the following diagram:—

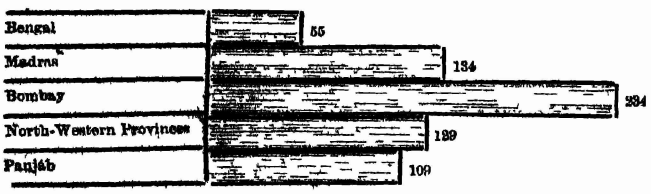


Diagram showing the incidence of land revenue in rupees per hundred of the population in the various provinces of India.

Scale, 100 rupees to an inch

The expenditure charged under land revenue, which is wholly provincial (except the charge for surveys and settlements, which is divided in the same proportion as the receipts are divided) has risen from Rs. 28,91,000 to Rs. 34,99,000, or by Rs. 6,08,000 in five years. The chief causes of increase under this head are the creation of the district of Khúlná, the improvement in the pay and position of the Subordinate Executive Service (half of whose salary is shown against land revenue and half against Law and Justice), and the additional expenditure on Government estates. The pay of the new Directorship of Agriculture, which was sanctioned in 1884 temporarily for two years, is also shown under this head as well as the Provincial share of the survey of Muzaffarpur under the Tenancy Act. These two items, which were not in existence when the contract was made, alone account for Rs. 1,12,000 of the total increase.

When Sir Rivers Thompson assumed the administration of Bengal in April 1882, the question of the amendment of the rent law in the Lower Provinces, which had for nearly 10 years been the subject of agitation and discussion, had reached a stage at which it was certain that some legislative measure would be introduced, though the nature of that measure had not yet been finally determined. The necessity for legislation had, indeed, been apparent ever since the occurrence, in 1873, of the serious agricultural disturbances in Pabná. The Behar famine of the following year diverted the attention of the Government to more pressing duties, but the report of the Famine Commission dwelt strongly on the necessity of placing the relations of landlord and tenant in Bengal upon a surer basis. The Agrarian Disputes Act of 1876 was passed by Sir R. Temple's Government as a temporary measure to meet emergencies like those of 1873, pending the fuller consideration of the whole question. A Bill dealing with the principles upon which rents should be fixed was prepared in 1876, but was not further proceeded with, and in 1878 the

Government of Bengal proposed a measure intended to provide only for the more speedy realisation of arrears of rent. This Bill was introduced into the Bengal Council, but it was found impracticable to confine it to the limited object indicated by its original title. The Select Committee on the Bill recommended that the whole question of a revision of the rent law should be taken in hand, and in April 1879 the Government of India sanctioned the appointment of a Commission to prepare a digest of the existing law and to draw up a consolidating enactment. Proposals which had been separately made for amending the rent law in Behar were also referred to the Commission for consideration.

The report and draft Bill of the Commission were presented in July 1880, and after the whole question had been further considered the matured proposals of Sir Ashley Eden's Government were submitted to the Government of India in July 1881. In March 1882 these papers were forwarded by the Government of India to the Secretary of State, with an important despatch, in which the history of the question was reviewed and the views of the Governor-General in Council, of which Sir Rivers Thompson was a member, were fully explained.

Such was the position of affairs when Sir Rivers Thompson became Lieutenant-Governor of Bengal. The reply of the Secretary of State was received in September 1882. His Lordship, while concurring in the view that legislation was necessary, and while accepting the majority of the recommendations made by the Government of India, demurred to a proposal which formed a prominent feature of the despatch. The Rent Commission had desired to maintain the existing rule by which the occupancy right was acquired by 12 years' continuous possession. The Government of Sir Ashley Eden had recommended that the occupancy right should be enjoyed by all resident raiyats. But the Government of India proposed to take the classification of lands instead of the status of the tenant as the basis on which the recognition of the occupancy right should be effected, and to attach the right to all raiyati lands. It appeared to the Secretary of State that this involved a great and uncalled for departure from both the ancient custom and the existing law of the country, and he declined to sanction it. The Government of India defended their proposals in a subsequent despatch written in October 1882, but the Secretary of State adhered to his former opinion, though he expressed his willingness to assent to the introduction of the Bill in the form which the Government of India preferred. The Government of India, however, declined to introduce a Bill in a form of which the Secretary of State disapproved, and it was determined that the measure should be framed upon the lines suggested in the Secretary of State's despatch.

A revised draft of the Bill was prepared in the Legislative Department of the Government of India, and on the 2nd March 1883 Mr. Ilbert moved in Council for leave to introduce it. On the 12th March Sir Steuart Bayley, in whose charge the Bill had been placed, moved that it should be referred to a Select Committee. After a long debate, extending over two days, the Bill was referred to a Select Committee consisting of the gentlemen named in the margin. Mr. Gibbon and Mr. Ameer Ali were afterwards added to the number, and on the death of Mr. Kristodass Pal, Mr. Peary Mohun Mookerjee succeeded him

His Honor the Lieutenant-Governor.
Sir Steuart Bayley
Mr. Ilbert
" Hunter.
" Quinton.
" Kristodass Pal
The Maharajah of Darbhanga
Mr Reynolds
" Evans
Major Baring

as a member of the Committee. The meetings of the Committee commenced in November 1884, and were carried on till the following March, when the Committee presented a preliminary report accompanied by a revised draft of the Bill. Four members of the Select Committee recorded minutes of dissent from the report.

The revised Bill was republished, and was subjected to a careful examination by divisional conferences of the executive officers of Government, as well as by judicial officers and by the non-official public. When these opinions had been received and considered, the views of the Government of Bengal were submitted to the Government of India in a letter dated the 15th September 1884. The letter is of interest, as containing a detailed and authoritative exposition of the Lieutenant-Governor's views. Among other points of less importance, Sir Rivers Thompson proposed to allow the free transfer of occupancy holdings in Bengal, giving the landlord, however, a veto if the transfer were to any but an agriculturist; to leave such transfers in Behar to be regulated by custom; to omit the clauses of the Bill which gave the landlord a right of pre-emption; to abandon the provisions for enhancement on the grounds of the prevailing rate, or of the increased productive powers of the land; to withdraw all limitations upon enhancement by suit, but to maintain them in cases of enhancement by contract; to restore the check which limited enhancements to a certain proportion of the gross produce; toprovide that tables of rates should be prepared only on the application of parties; to retain substantially the existing law of distraint; and to provide for a cadastral survey and the preparation of a record of rights.

The Select Committee resumed its sittings in November 1884, and early in the following year it presented its final report, which was accompanied by minutes of dissent from several members of the Committee. The debate, however, which followed, showed that the great majority of the dissentients fully accepted the principles of the Bill, though they thought some of its provisions unsatisfactory or incomplete.

On the 27th February 1885 the Bill was brought forward in Council by Sir Steuart Bayley, who moved that the report of the Select Committee should be taken into consideration. To this an amendment was moved that the Bill should be republished before being further proceeded with. After an exhaustive debate, which extended over two days, and in which the principles of the Bill were fully discussed, the amendment was rejected by a large majority. The Council then proceeded to discuss the clauses of the Bill. Above 200 amendments were placed upon the notice paper; but many of these were formally withdrawn, or were tacitly dropped. Upon all the important provisions, however, of the Bill, there was an animated debate, which extended over the 4th, 5th, 6th, 9th, and 11th of March. During this discussion it was the object of the Government of Bengal, while resisting those amendments which subverted or weakened the principles which the Bill was intended to establish, to strengthen the position of the occupancy raiyat by extending the right to the parganá instead of confining it to the village; to modify the rule of enhancement on the ground of the prevailing rate; and to give the non-occupancy raiyat the security of a five years' initial lease. These amendments were not accepted by the Council, but the Government of Bengal was successful in maintaining, against strong opposition, a limitation upon the enhancement of an occupancy

raiyat's rent by private contract. The Bill was passed by the Council on the 11th March; it received the assent of the Governor-General on the 14th, and became law as Act VIII of 1885. The Act came into force on the 1st November following, except the chapters relating to distraint and to deposit of rent, the operation of which was postponed to the 1st February 1886, to enable the High Court to frame the necessary rules.

The Bill which thus became law differed in some important particulars from the measure which had been introduced into Council two years before. Perhaps no legislative enactment was ever subjected to fuller examination, or to more searching criticism. The question had engaged the attention of the Government and the public for more than ten years, the Select Committee, which included members holding the most diverse views, held no less than 64 meetings, and had before it several hundreds of reports, opinions, and memorials. The result was that the Bill which finally commended itself to the approval of the Council was in some respects a compromise, and, if it was less thorough and complete, was certainly a more practical and workable law than the draft which was originally laid before the Council. Some of the more important modifications which were introduced may be briefly noticed here. The Bill as originally brought in embodied the provisions for the sale of patní táluks; but it was eventually determined to leave Regulation VIII of 1819 untouched. The settled raiyat acquired by the original Bill an occupancy right in all land held by him in the village or estate. The Act limited this to land held in the same village. The occupancy raiyat was empowered to transfer his holding, subject to a right of pre-emption by the landlord at a price to be fixed by the Civil Court. The pre-emption clauses were struck out, and the power of transfer was left to be regulated by local custom. The rent of an occupancy raiyat could not be enhanced, under the Bill, to an amount exceeding one-fifth of the gross produce, nor that of a non-occupancy raiyat to an amount exceeding five-sixteenths: but no limitation of this kind finds a place in the Act. In suits for enhancement the Bill provided that no increase of demand in excess of double the old rent should be awarded but there is no corresponding provision in the Act A prominent feature of the Bill was the preparation of tables of rates, by which lands were to be classified according to the capabilities of the soil, and rent rates were to be fixed. which should be in force for not less than 10, or more than 30, years. but this Chapter was entirely struck out. The Bill provided that the non-occupancy raiyat, if he were ejected from his holding, should receive compensation for disturbance: but no such stipulation will be found in the Act

The only material point in which the Bill was modified in the opposite direction was in the enhancement of an occupancy raiyat's rent by contract out of court. The Bill allowed such enhancements to the amount of six annas in the rupee upon the old rent but the Act reduced this to two annas in the rupee, the Government of Bengal being strongly impressed with the danger of allowing pressure to be put upon tenants to enter into contracts which would virtually defeat the object of the legislature. It was, however, provided that a higher rate of rent might be recovered by suit if it had been actually paid for three years.

The Bengal Tenancy Act, perhaps the most important measure which has passed into law since the Regulations of 1793 were promulgated, will be found

on examination to have had three main objects in view, to one or other of which almost all of its sections can be referred. The ancient agricultural law of Bengal was founded on a system of fixity of tenure at customary rents. But this system was gradually ceasing to be suited to the altered economic conditions of the country, and the attempts which were made to solve the question by the substitution of positive law for customary usage had hitherto been unsuccessful. In some parts of Bengal, in which the zamíndárs were powerful, the raiyat was treated as a mere tenant-at-will: in other parts, in which the population was comparatively sparse, the raiyat refused to pay any rent unless the zamíndár agreed to his terms. Act X of 1859 rather added to the difficulty than removed it. On the one hand, this Act made it almost impossible for the raiyat to establish a right of occupancy: on the other hand, it placed insuperable obstacles in the way of the zamíndár who sued for an enhancement of his rent. The courts of law, with rigid impartiality, required the raiyat to establish his occupancy right by showing that he had cultivated the same plot of ground for 12 successive years, and demanded from the landlord the impossible proof that the value of the produce had increased in the same proportion in which he asked that his rent should be enhanced. The legal maxim, *semper presumitur pro negante*, was never more copiously illustrated than in the various phases of this rent litigation. The party upon whom lay the burden of proof was almost certain to fail. To this evil the Tenancy Act was intended to afford a remedy. The principle of the Act may be said to be based upon a system of fixity of tenure at judicial rents: and its three main objects are,—first, to give the settled raiyat the same security in his holding as he enjoyed under the old customary law: secondly, to ensure to the landlord a fair share of the increased value of the produce of the soil: and, thirdly, to lay down rules by which all disputed questions between landlord and tenant can be reduced to simple issues and decided upon equitable principles. A good example of the first will be found in the clause which throws upon the landlord the onus of disproving the raiyat's claim to a right of occupancy: the second is illustrated by the section relating to price-lists, which relieves the zamíndár of the trouble of showing that the value of the produce has increased: the third pervades the whole of the Act, and is especially conspicuous in the valuable section which authorises an application to determine the incidents of a tenancy, and in the chapter which relates to records of right and settlements of rents. The maintenance of the principles of the Act is further safeguarded by a section which restricts the power of entering into contracts in contravention of its fundamental provisions.

In pursuance of these main principles the Act lays down rules to guide the courts in determining whether a tenant is a tenure-holder or a raiyat. it provides a procedure for the registration of the transfer of tenures: it defines the position of raiyats who hold at fixed rates of rent: it simplifies and facilitates suits for the enhancement or reduction of rent: it establishes a system for the commutation of rents payable in kind: it specifies the grounds on which a non-occupancy raiyat may be ejected: it prescribes rules for instalments, receipts, and interest upon arrears: it encourages the making of improvements: it restricts subletting: it provides for cases in which holdings are surrendered or abandoned: it protects the interests, both of the parties and of the general public, in cases of disputes between co-sharers: it lays down a procedure for recording the private lands of proprietors: it introduces a

now system of distraint; and it gives protection to sub-tenants when the interest of the superior holder is relinquished or sold in execution of a decree.

That the Act is a complete and final settlement of the questions with which it deals has not been alleged by its most strenuous advocates. But that this want of completeness and finality was not merely natural but inevitable was forcibly urged by Mr. Ilbert in the course of the debate on the Bill, and the question can hardly be better summed up than in the words he used.— "What the Council have to consider," said the Honourable Member, "as practical men is, not whether this is an ideally perfect measure, not whether it is a final settlement of questions between landlord and tenant in Bengal, not whether it is likely to usher in a millennium either for the zamindár or for the raiyat, but whether it represents a step in advance, whether it does something substantial towards removing admitted defects in the existing law, whether it does not give some substantial form of security to the tenant, some reasonable facilities to the landlord. It is because I believe that the measure, however it may fall short of ideal perfection, does embody substantial improvements in the existing law that I commend it to the favourable consideration of the Council."

The Act came into operation on the 1st November 1885, and has, therefore, been too short a time in force for a full estimate of its working. The principal business of the revenue offices in connection with the Act has related to the issue of notices and payment of landlords' fees on transfers of tenures. A petition was addressed to Government on the subject of the working of the provision that tenants holding at a rent fixed in perpetuity must give notice and pay a fee to the landlords, through the Collector, on transferring their holdings. It was alleged that raiyats not holding at fixed rates adopted this procedure, thereby creating evidence which in future might be accepted as proof that they really occupied the privileged position which they claimed. It has been pointed out that this fear does not rest on any solid foundation. There were in 1885-86, 223 cases of appraisement of produce, which occurred principally in the Patna Division. The result has been reported to have been so far satisfactory. The subject of the survey and record of rights in the Muzaffarpur district, and the other similar surveys sanctioned during the year 1886, will be found noticed under the head of Survey. During the year 1886-87 the most important action taken by the Board of Revenue has been the preparation of a draft set of rules for settlement procedure with special references to changes which have been effected by the Act These draft rules have been circulated to selected officers for opinion.

The provisions of the Act on the subject of receipts for rent have produced a very immediate and striking effect, and have given matter for comment in every part of the Province. It was part of the enactment on this subject that rent receipts shall contain certain stated particulars; and further, that if a receipt did not contain substantially the particulars required, it shall be presumed, until the contrary is proved, to be an acquittance in full of all demands up to date. Such a change affecting every payment of rent throughout the Province, and tending to bring old disputes to a head, naturally gave rise to some trouble and misunderstandings at first. The misunderstandings have been already in many cases cleared away, and by degrees only those cases will remain which the law was intended to meet, viz. those in which the landlord has been keeping his accounts so as to show a higher rent than that

which is authorised by law; those in which illegal cesses have been collected; and those in which through former neglect the real rent has never been ascertained. On such estates the first effect of the new law may be to increase contention with the ultimate effect of producing a satisfactory settlement. Even in these cases what brings matters to an issue is merely the insisting on the discharge of an obligation which existed under the old law, and has always been considered necessary in Bengal—the entry in the receipts of the period in respect of which rent is paid. This is a necessary form of honesty and fair dealing insisted on in business of every kind; and if its observance in transactions between Bengal zamíndárs and their raiyats causes friction, that is the best proof that the precaution is necesary either to clear up uncertainty or to prevent fraud. That an appreciable effect has already been produced from this provision of the new law appears from the fact that during five months nearly seven and a half millions of the specimen forms of receipt were sold. In addition to these, forms are printed at private presses, those supplied by Government having purposely been disposed of at a price which permits of their being undersold.

With the exception of these difficulties in regard to notices of transfer and to receipts, the working of the new law has been free from any such disturbance of the relations between landlords and tenants as was apprehended by some of those who opposed the introduction of the measure. The other provisions of the Act appear to be working smoothly, recourse is being had to the sections relating to the appraisement of produce rents and to the registration of improvements, and some applications have been received for the settlement of rents. At present, however, there are no materials for forming an opinion on the operation of the more important sections of the law, such as the publication of price-lists, the sale of tenures subject to encumbrances, and the modified procedure for distraint. The real benefits of such a measure as the Tenancy Act are to be looked for, not in the number of cases in which application may be made to the courts to enforce its provisions, but in the peaceful acceptance by all classes of the principles which underlie it, that the landlord is to be secured in the enjoyment of his fair rent and that the tenant is to be maintained in the possession of his rightful holding.

EXCISE.

Under the previous provincial contract the extraordinary development of the revenue from excise, and the consequent profit to the provincial revenues, were among the most striking features of the financial history of the period. Between 1877-78 and 1881-82 the receipts from this source rose from Rs. 68,80,000 to Rs. 93,74,000, or by close upon 25 lákhs of rupees, and the whole of this, except 4 lákhs, represented clear gain to the local Government. Simultaneously the corresponding charges were reduced by improved administration from Rs. 3,06,000 to Rs. 2,73,000. This remarkable increase was due in a considerable degree to the reintroduction and development of the outstill system but a much more powerful stimulant is to be found in the bumper harvests, the activity; of trade, and the general prosperity, which marked the three years 1879-80, 1880-81, and 1881-82. The importance of this factor was clearly understood by the late Lieutenant-Governor, who wrote in February 1882—"No hope whatever can be founded on the recent rapid expansion of the excise revenue. The increase has been so remarkable that a check is probable, and if a bad harvest occurs, is inevitable."

The new contract estimate of the provincial share of excise revenue was taken at Rs. 49,55,000, whereas the actuals in each year, so far as is known, have been—

	Rs.
1882-83	48,94,000
1883-84	52,13,000
1884-85	50,26,000
1885-86	48,38,000
Estimated for 1886 87	49,70,000

It will be seen from the above that Sir Ashley Eden's anticipations have been fulfilled to the letter. The flood-tide of commercial and agricultural prosperity reached high-water mark in 1883-84, and the ebb has been swift and extreme. The rainfall in that year was deficient and unevenly distributed; and though no actual distress occurred at that time, the advance in the price of food, and the recession in the wages of labour in the western districts, injuriously affected the settlements of the outstills, which are highly sensitive to seasonal influences. The revenue from country spirits in 1884-85 fell short of that of the previous year by Rs. 1,13,000 (the decrease being almost entirely in the Patná Division), and this would have been more than doubled but for an apparent (but not real) increase of Rs 1,28,000 in Calcutta. In 1884 and 1885 the rainfall was again unfavourable in quantity and distribution, and the failure of the crops was so serious in part of the Province as to exhaust the reserves of the villagers and necessitate the opening of relief works by Government as a natural consequence. The downward movement of the excise revenue continued. From the above figures it can be calculated that, so far as receipts are concerned, the net result of the excise collections has been a profit to the Government of this province of Rs. 96,000 during the whole term of the financial contract. This, however, has been converted into a small loss by the progressive increase in the expenditure. This increase of expenditure, which has been greatest in the last two years of the quinquennial period, as well as some part of the retardation on the receipts, is due to the recommendations of the Excise Commission.

The objections of a portion of the public to the outstill system, which had been strongly urged during the last years of Sir Ashley Eden's Government, were renewed after Sir Rivers Thompson's accession to office, notwithstanding the stringent orders issued against the multiplication of shops, which led to a large reduction in the number of outstills. At length, in consequence of clear indications of a serious increase in the consumption of spirituous liquors among the people of this Province, and as there appeared to be reason to believe that this increase was to some extent due either to the outstill system of excise or to the manner in which that system had been worked, the Lieutenant-Governor, in a Resolution dated 4th December 1883, appointed a Special Commission to consider and report upon the subject of the excise on country spirits in all its aspects after careful local inquiry. The Commission began their labours on the 10th December 1883, and were occupied continuously from that day until the 10th April 1884 in examining witnesses, inspecting outstills, and conducting experiments in distillation in different districts. From the time of their appointment until the date on which they brought their labours to a close, they were incessantly occupied in practical inquiries and experiments of a most valuable nature. Nothing was taken for granted, every point was investigated with the most scrupulous fidelity and impartiality, and no conclusion was adopted without thoroughly sifting the evidence on which it was based. The

result was embodied in an admirably clear report, which was submitted on the 10th September 1884, and which, whatever may be the future systems of excise in this Province, must take its place as a standard work of reference, to which every one will turn who may desire information on the history of our excise revenue, or on indigenous methods of distillation and the results they yield.

It is, the Lieutenant-Governor believes, an idea commonly accepted by many who have not studied the subject, that the outstill system was a novelty; that it had never been tried before; and that until the form of the system in existence in 1883 was introduced, there had never been any change from the central distillery arrangements which had immediately preceded it. As a matter of fact, however, the outstill system is by far the older of the two, dating, it is believed, from the time of the Mughal emperors, and central distilleries were only first established in 1813. It was not till 1863 that it was decided to substitute them generally for the older outstills. This sudder distillery system, as it was called, was found to encourage illicit distillation, and in 1871 the outstill system began again to be gradually introduced, and was finally sanctioned on a larger scale in 1877 and the following years, so that the Excise Commission, in commencing their inquiries in 1883, found an exclusive system of outstills in existence in all but a few districts where sadr distilleries were preserved. Under this system the license-holder paid a certain fee, the amount of which was commonly settled by auction, for the right to distil and sell liquor in a certain fixed place. He was allowed to work only one still, and was forbidden to distil at night or to sell wholesale quantities. Sales after 9 P.M., or in any place other than the shop for which the license was granted, were also prohibited; but no restrictions were placed either on the quantity to be distilled or on the quality of the liquor. Under former rules the capacity of the still had been always defined: but in 1878 the rule prescribing a limit of capacity was abrogated under orders of the Board of Revenue, and since then the holder of an outstill license had been permitted to increase the size of his still at discretion.

Under this system the revenue rapidly increased, rising from Rs. 28,90,000 in 1877-78 to Rs. 52,13,000 in 1883-84, and financially, therefore, the scheme was a success. But the Commissioners' inquiries led them to believe that, even from this point of view, the system, for various reasons, would not in the long run prove so lucrative as it at first sight appeared. The most important question, however, was that of increased consumption, and if it was proved that the then existing system offered undue encouragement to the drinking of spirits, the Lieutenant-Governor was of opinion that financial reasons could not be allowed to stand in the way of the needed reforms. The special object, therefore, of the Commission was to ascertain the causes of this increase, and to suggest means by which they might be removed. In their opinion the primary cause of the growth of the habit of drinking among the people was the influence of social, moral, and religious changes in relaxing the restrictions which had previously kept large classes from indulging in spirituous liquors. Increase in the purchasing power of the consuming classes was assigned as a reason for some part of the increased consumption; but the greater part of it had to be otherwise accounted for, and the Commission enumerated the following causes:—

(1) The suspension in 1878 of the long-established rule limiting the capacity of stills, thus enabling the distillers to produce from their large stills greatly increased quantities of liquor at greatly reduced prices.

(2) The excessive number of shops that had been licensed, total population and area having alone been considered, although the proportion of the consuming population to the total population varies greatly in different districts.

(3) Improper selection of sites for shops.

For removing these causes the Commission made certain recommendations, the principal of which, together with the action taken upon them by Government, are here briefly described.

The Commission was of opinion that the outstill system properly regulated was the most suitable for the country in general, but when special means of close supervision existed, and a large drinking population was found in a small and well-defined area, central distilleries, in which alone a uniform tax could be levied on spirit according to its strength, should be established. The Lieutenant-Governor accepted this suggestion, and it was decided to place such distilleries in certain large towns.

The Commission also recommended that in other towns the outstills should be grouped within one enclosure outside the inhabited parts of the town, and that care should be exercised in the selection of the retail shops within the town supplied by these stills. The Lieutenant-Governor considered that this dealt with a matter of municipal rather than of excise administration, and that, as long as District and Municipal Boards had a voice in the selection of sites and other matters of local interest, no general rule need be laid down. The essence of the proposal was that outstills should not be placed where they were likely to be objected to as nuisances, and where no objections were preferred, no change need be made.

It would have been useless, however, to re-establish central distilleries if proper safeguards were not provided against the competition of surrounding outstills; and this led to the consideration of the third recommendation made by the Commission, that the capacity of each still should be limited to the existing demand for liquor in the area to be supplied by it, and that the upset price of each still should be proportionate to that capacity and calculated on the basis of the duty which could be levied by Government on its outturn at a given strength. In connexion with this, other recommendations were made by the Commission, the most important of which were that in each district a maximum aggregate capacity for all outstills should be fixed, and that the aggregate capacity of the fermenting vats allowed to each still should also be fixed. Another recommendation of the Commission was that a minimum price should be fixed for the cheapest sort of liquor, according to the circumstances of each district and the prices now prevailing. The two principal objects of the proposed rule appear to have been—*first*, to break down the growing tendency towards the establishment of monopolies caused by wealthy capitalists being able to force down prices until they drove their poorer rivals out of the trade, and *secondly*, by thus raising average prices and restricting consumption, to encourage the production of a more wholesome liquor. The Lieutenant-Governor was not prepared to accept in full these suggestions made by the Commission without further inquiry and consultation; and the Board of Revenue were therefore requested to make a full experimental trial, in the district of Patná, of those points of the system, and in all other districts where central distilleries had been established to fix a certain area in the neighbourhood of

such distilleries within which no outstills would be allowed, and a somewhat larger area within which the capacity of outstills should be limited.

The last of the main proposals made by the Commission was that excise establishments should be increased. The Lieutenant-Governor accepted their views on this point, and the excise staff was strengthened in several districts. The Lieutenant-Governor also accepted the more important of the Commission's recommendations on minor matters of detail, with which it is not necessary to deal at length here.

These orders of Government were not all of them passed till the 10th March 1886, but the substitution of sadr distilleries for outstills was carried out before this date, in nine large towns during 1885-86, and in two more from the 1st April 1886. The year 1885-86 was a bad one to judge the financial results by, there having been bad harvests in most of the districts in which sadr distilleries were erected, and the net revenue from country spirits decreased from Rs. 50,75,000 in 1884-85 to Rs. 44,38,000 in 1885-86. A large proportion of this decrease of revenue must, however, be referred to the adoption of the changes recommended by the Commission, but Sir Rivers Thompson, while fully satisfied of the wisdom of maintaining the outstill system in rural tracts, considered that the extension of this system to some urban areas resulted in an artificial increase in the revenue, accompanied by serious defects in administration; and he believes that a return to the method of direct control in large towns is advisable in the interests of good government.

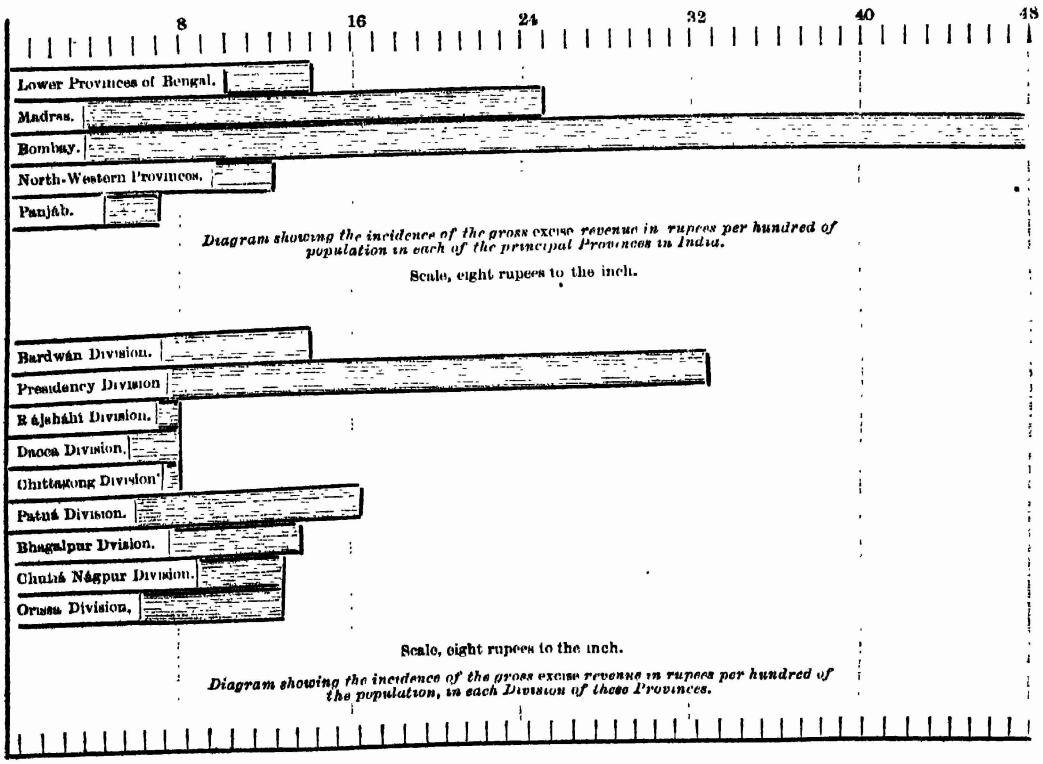
Since the conclusion of the year 1885-86 a full experimental trial of the system recommended by the Commission has been conducted at Patná. It is very satisfactory to learn that hitherto no difficulty has arisen on account of the restrictions imposed on the capacity of stills and fermenting vats. In this district, during the half-year ending on the 30th September, the net financial result of the reforms effected on the excise administration was a decrease in the revenue of Rs. 10,635 as compared with the corresponding period of the preceding year. But the local authorities are confident that this loss will be more than made up by increased realisations in the current half-year, the average daily receipts on account of duty and distillery fees being in December more than double what they were in April and May. The Lieutenant-Governor being of opinion that the measure of success already attained is sufficient to justify the proposal now made to extend the system to other districts from the beginning of 1887-88, orders have been issued to that effect. These orders aim at the cautious extension of the system recommended by the Commission, and the degree of success which has been attained in Patná serves to justify the hope that, with due care and attention on the part of local officers, the manufacture and sale of liquor throughout the Province may gradually be brought under efficient control without any serious loss of revenue. The experiment of fixing a minimum price of liquor has also been tried in Patná, and appears to have worked well. In view, however, of the expediency of working cautiously in effecting a general change of system involving large financial interests, Sir Rivers Thompson has thought it best to await the result of another year's experience in the Patná district before laying down a rule fixing a minimum price elsewhere.

In all other districts besides those to which the Patná system is now about to be extended, it has been considered sufficient for the present that the recommendations of the Excise Commission should be partially adopted, namely, to the

extent of restricting the capacities of outstills, so as to make them conformable to the local demand. Moreover, in those districts in which there are sadr distilleries, another step in advance will be taken by limiting the number and size of the fermenting vessels of the outstills bordering on the sadr distillery area. Arrangements are now being made for demarcating the area, in the neighbourhoods of distilleries in districts where sadr distilleries have been established, in which no outstills should be licensed, and a somewhat larger area in which the capacity of outstills should be limited, and it is intended that this and the other portions of the scheme just mentioned shall take effect from the 1st April 1887.

A number of minor orders intended to act in the same direction, including orders relating to the method of fixing the upset price of outstills, and prohibiting the sale of liquor to children, have also been passed by Government; and the Lieutenant-Governor hopes that it will be found that as a result of the Excise Commission's labours the excise administration of the Province has been placed on a sound and satisfactory footing.

The incidence of the gross excise revenue in these Provinces is very light, being only Rs. 14 per hundred of the population, the incidence in other Provinces being Rs. 48 in Bombay, Rs. 24¾ in Madras, Rs. 11¾ in the North-Western Provinces, and Rs. 7 in the Panjáb. The lowness of the rate in the latter two Provinces is probably due in some degree to the absence of Presidency towns, in which the consumption of exciseable articles is always great in proportion to the population. The incidence varies greatly in different parts of this Province, the rate per hundred in 1884-85 having been Rs. 33 in the Presidency Division, Rs. 17 in Patná, Rs. 14 in Bardwán and Bhagalpur, Rs. 13 in Orissa and Chutiá Nágpur, and Rs. 8 in Rájsháhí, Dacca, and Chittagong. The following diagrams illustrate the above statements:—



ROAD AND PUBLIC WORKS CESSES.

The current demand on account of the road and public works cess was about 70 lákhs of rupees in 1882-83. In the following year it increased by more than three lákhs, and since then has shown a steady tendency to rise. This rise is due to the revaluations which have been carried out in several districts. The fact that whenever these were carried out on any extensive scale there was an increase in valuation and assessment, shows either that the zamíndárs derived a larger rent from the land than was shown in the earlier valuations, or that rents have in the meanwhile been enhanced.

The contract estimate of receipts from the public works cess (which are wholly provincial, and which correspond to what are called in the Provincial Accounts, Provincial Rates) was taken at Rs. 35,40,000, and the actuals in each year have been—

	Rs.
1882-83	36,07,000
1883-84	38,15,000
1884-85	37,65,000
1885-86	38,68,000
Estimated for 1886-87	39,17,000

The increase is due to the revaluations already referred to. The net result, as far as the receipts are concerned, is thus a profit to this Government of more than 12½ lákhs of rupees for the whole term of the contract. The drop in the realisations for the year 1884-85 was only apparent, and was principally due to the fact that the last day for payment of the September instalment fell within the Durgá Pújá holidays.

ASSESSED TAXES.

The account head of Assessed Taxes, which was wholly Imperial under the former contract, is now equally divided between the Imperial and Provincial Governments, and represents the receipts of the lately abolished license tax. The income tax, which has been substituted for the latter from April 1886, is wholly Imperial, and the figures shown below for 1886-87 represent the grants made by the Supreme Government to avoid the disturbance of the contract. The depression of trade which has marked the greater part of the last five years, and which has, for Bengal, been intensified by special causes, such as the through opening of the Rajputana-Malwa State Railway in the latter part of 1881, and the consequent diversion of a part of the trade of Northern India to Bombay, has injuriously affected the receipts from this source. The contract of 1882 was framed on the basis of a revenue of Rs. 8,25,000 (Provincial share) from this source; whereas the actuals have been Rs. 7,60,000, Rs. 7,59,000, Rs. 7,48,000, Rs. 7,50,000, and Rs. 7,50,000, respectively. The aggregate loss to the Provincial revenues has therefore exceeded 3½ lákhs of rupees during the currency of the contract, notwithstanding that special efforts have been made to ensure the accuracy of the assessments and to prevent the escape of persons legally liable.

It is a common remark that Bengal pays much less in proportion to its population than the other Provinces of India, and that the system is defective. This impression is not borne out by the facts. In 1884-85 every hundred

persons in Bengal paid Rs. 2·15 in the shape of license tax, while an equal number of persons paid Rs. 2·42 in the Central Provinces, Rs. 2·53 in the Panjáb, Rs. 2·75 in the North-Western Provinces, Re. 1·38 in Madras, and Rs. 7·63 in Bombay. Bengal ranks lower than might have been expected; but an inspection of these figures, points to the conclusion that it is the conditions of Bombay that are exceptional rather than those of Bengal.

Within the Province the incidence of the license-tax varied considerably. In 1885-86 every hundred persons paid Re. 1·96 in the Rájsháhí Division, Re. 1·85 in the Bhágalpur Division, Re. 1·66 in the Dacca Division, Re. 1·61 in the Presidency Division (omitting Calcutta), Re. 1·56 in the Chittagong Division, Re. 1·44 in the Bardwán Division, Re. 1·35 in the Patná Division, Re. 1·17 in the Chutiá Nágpur Division, and Re. 1·00 in the Orissa Division. This is illustrated by the following diagram:—

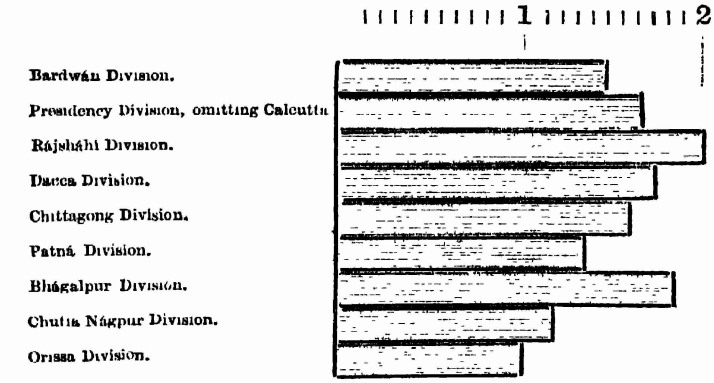


Diagram showing the comparative incidence of the license-tax *in rupees per hundred of the population in each Division of these Provinces. Scale, one rupee = one inch.*

The year 1878-79 was the first year of the operation of the License Tax Act, I (B.C.) of 1878. This Act imposed a duty on all trades, dealings, and industries the profits of which were not less than Rs. 100 a year. The minimum taxable income was, however, raised in 1879-80 to Rs. 250, and in the following year was further raised to Rs. 500 under the amending Act, II (B.C.) of 1880. This measure, which exempted from taxation 66,567 of the poorest class of assessees, and relieved from harassment a still larger number of persons with incomes slightly below the former minimum, did much to allay the discontent with which the tax was, as a direct tax, necessarily received. The Act of 1880 further assimilated the law for Calcutta and the districts in the interior; absolved the assessees from the liability to take out more than one license, however many places of business they might have; exempted municipal bodies from the performance of license-tax work; granted the right of reference to the Commissioner by a person aggrieved by the order of the Collector in cases of objection and appeal; and imposed the obligation on the license-tax authorities to serve notices on assessees of all classes. The alteration in the minimum taxable income necessitated a complete revision of the assessment lists of the lowest class; and as the assessments in the higher grades also required careful scrutiny, a complete assessment of the Province was undertaken in 1880. This assessment has formed the basis of the administration of the tax since then, though the lists for each district have of course been carefully revised in each year.

In the first few years of the administration of the tax the collections were disproportionately small compared with the gross demand, the percentages being 44·0 in 1878 79, 61·7 in 1879-80, and 55·4 in 1880-81. This result could scarcely have been avoided in the initiation of so large and difficult an undertaking without a specially trained staff, and without the assistance of the permanent revenue establishments which did so much to facilitate the work in the North-Western Provinces and other temporarily-settled Provinces. The assessing officers not being allowed to make any precise inquiry into income, were compelled to settle on general grounds the classes in which the assessees should in the first instance be placed, leaving them to object if so advised. The disparity was further due to the want of adequate supervision by district Collectors. In the commencement the circle officers were left too much to their own resources, and it is certain that whether from pressure of other business or from trusting to the possibility of correcting errors at a later stage of proceedings, many Collectors failed to give sufficient time and attention to the guidance of circle officers in making the original assessments, and much trouble was thereby occasioned at a subsequent stage of the work. Gradually the proportion which the amount collected bore to the gross demand became more satisfactory. The following figures show the total receipts from license-tax from 1878-79 to 1885-86 :—

	Rs.
1878-79 ...	20,19,400
1879-80 ...	25,61,700
1880-81 ...	16,53,000
1881-82 ...	16,38,900
1882-83 ...	15,20,300
1883-84 ...	15,17,600
1884-85 ...	14,96,400
1885-86 ...	15,33,800

The large decrease in receipts in 1880-81 was chiefly due to the raising of the minimum taxable income to Rs. 500. This measure also resulted in a large reduction in the cost of collection. In 1878-79 the charges aggregated Rs. 3,34,069; in 1879-80, Rs. 1,47,785 ; in 1880-81, Rs. 1,62,694 ; in 1881-82, Rs. 83,034 ; in 1882-83, Rs. 89,371 ; in 1883-84, Rs. 91,249; in 1884-85, Rs. 87,159 ; and in 1885-86, Rs. 85,182.

According to the figures of the last census the proportion of assessees was—

1 in every 78	in 1878-79.
1 in every 480	in 1879-80.
1 in every 921	in 1880-81.
1 in every 965	in 1881-82.
1 in every 951	in 1882-83.
1 in every 932	in 1883-84.
1 in every 946	in 1884-85.
1 in every 951	in 1885-86.

The public works cess and the license-tax represent the taxation imposed in Bengal (the former being peculiar to the Province) in connexion with the scheme of "famine finance," with which the name of Sir John Strachey is associated. The scheme proposed to improve the financial position of the empire to the extent of two krors of rupees a year, of which 50 lákhs were to

be regarded as a normal working surplus, while 150 lákhs were to be devoted to famine insurance, being expended on actual relief, on reduction of debt, or on the construction of remunerative public works calculated to prevent or mitigate the severity of famine. Part of this sum it was proposed to provide by new taxation (*i.e.*, by the license-tax), and part by throwing additional charges on the Provincial Governments. But, as far as Bengal is concerned, the whole contribution paid by this Province towards the so-called Famine Fund has been raised by additional taxation; for the charges thrown on Provincial accounts by the contract of 1877, which consisted mainly of the interest on Provincial railways and canals, were met by the imposition of the public works cess, which, as already stated, is peculiar to Bengal.

The total amount of license-tax collected in these Provinces, in 1885-86, including both Imperial and Provincial shares, amounted to Rs. 15,34,000.

The estimated collections of income-tax for 1886-87 are Rs. 36,00,000.

STAMPS.

During the period under review the stamp revenue continued to be levied under the Stamp Act, I of 1879, and the Court-fees Act, VII of 1870, but a variety of modifications were made from time to time in the rules in order to give effect to the wishes of the general public and the mercantile community. Thus in 1882-83 one of these had the effect of exempting from payment of stamp duty foreign bills-of-lading, *i.e.* bills-of-lading executed out of British India and relating to property to be delivered in British India. This change was highly popular with the mercantile public, but it led to a considerable decrease of revenue. Another important concession in the same year was the relaxation of the rules relating to the allowance for stamps used for a bill-of-exchange which had been spoiled or rendered useless. In the following year adhesive court-fee stamps of values of Rs. 10 and upwards were called in and declared obsolete, and impressed stamps introduced in their stead, new adhesive court-fee labels for the lesser values were brought into use of a larger size and a uniform colour, and arrangements were made for the retail sale at sub and branch post-offices of the one-anna revenue stamps, commonly called receipt stamps, in order that, by rendering them more easily available to the people the temptation to defraud the revenue might be lessened. Two systems of defacing impressed labels —one by a coloured date impression, and the second by perforation—were tried, but were found unsuccessful. In 1884-85 two proposals, the first for the substitution of larger sized impressed non-judicial stamp paper of the value of four annas in place of the two-anna paper then used for copies, and the second for the amendment of the Stamp Act, so as to impose a uniform duty on all insurances and re-insurances, other than life and marine insurances, were considered by the Government of Bengal and laid before the Government of India. No final orders were, however, issued till the following year, when the first was carried out with result of reducing the cost of manufacture by one-half. Having regard to the economy thus effected, the question has been raised whether a similar description of paper should not be used for other non-judicial stamps of small value, from which a saving of Rs. 50,000 a year would result. The question is now under the consideration of the Government of India. The question of the reduction

on the policies of insurance was settled so far that the duty on policies of re-insurance was fixed at one rupee, irrespective of the policy; but the proposal to reduce the rates on short-term policies is still under consideration.

Under this head of revenue the development of the revenue has been steady and continuous. The total receipts, which had risen from Rs. 1,08,15,000 in 1877-78 to Rs. 1,20,24,000 in 1881-82, again rose to Rs. 1,31,16,000 in 1885-86, and are estimated at Rs. 1,32,56,000 for the current year. The contract estimate of receipts (Provincial share) was taken at 59 lákhs, while the actuals have been Rs. 61,06,000, Rs. 62,88,000, Rs. 64,96,000, Rs. 65,58,000, and Rs. 66,28,000 (estimated) respectively.

The increase has been uniformly distributed over the whole period of the contract. There has been no legislation during this period affecting the stamp laws, but a material portion of the improvement in the revenue is undoubtedly due to the arrangements under which process-serving fees in revenue courts and copying fees are now levied in court-fee stamps instead of in cash. To the former cause at least Rs. 50,000 of the increase in 1884-85 is due, and larger sums in the following years. The remainder of the increase, of which two lákhs is under non-judicial stamps and upwards of 10 lákhs under court fees, is attributable to improved administration and greater facilities for obtaining justice. The expenditure of this department, the contract grant for which was fixed in 1881-82 at Rs. 2,17,000, has been Rs. 2,14,000, Rs. 2,20,000, Rs. 2,34,000, Rs. 2,46,000, and Rs. 2,50,000 (estimated) in each year of the contract, the ultimate increase being only Rs. 33,000. More than half of this increase, small as it is, is due to the greater cost of the new description of court-fee stamps introduced during 1884-85 for greater security against fraud. The direct cost of raising the stamp revenue in Bengal is slightly over $3\frac{3}{4}$ per cent. The incidence of the tax (Imperial and Provincial) is Rs. 19 per hundred of the population, against Rs. 27 in Bombay, Rs. 18 in Madras, Rs. $17\frac{3}{4}$ in the Punjab, and Rs. $13\frac{1}{2}$ in the North-Western Provinces.

CONCLUSION.

From the preceding remarks it will readily be perceived how, owing to financial difficulties, the task imposed on Sir Rivers Thompson has varied from that which fell to the lot of his predecessor.

Sir Ashley Eden enjoyed the advantage of a provincial financial contract with the Supreme Government which secured to the Province under his control the entire benefit accruing from improved administration, and which in the event yielded financial results surpassing all anticipation. His term of office was favoured with entire immunity from famine and from other forms of natural disaster; the commercial torpor then paralysing the industries of the civilised world had not yet spread to India; and a succession of splendid harvests raised the cultivating classes almost into temporary affluence. The ample resources thus unexpectedly brought within his reach he liberally employed in improving many branches of the machinery of Government, and in supplying the Province with railways, canals, public buildings, and other permanent improvements of which the want had long been admitted. During the past five years the financial history of Bengal has been altogether different. The contract of 1877 was succeeded by a settlement which left little scope for the development of the

Provincial revenues, and which speedily necessitated a serious contraction in the scale of Provincial expenditure. Trade has at last succumbed to the influences which have produced universal stagnation in the commercial world of Europe and America, and its languishing vitality has been promptly reflected in many branches of the public exchequer. A scanty and uneven rainfall in three years in succession has swallowed up the profits of five years of plenty, and although actual distress has nowhere been so acute as to call for the intervention of the State except on a small and partial scale, in many districts the resources of the poorer classes have been wholly exhausted, and no margin whatever left for expenditure on luxuries. It has often been difficult to provide adequately for the ordinary requirements of the public service, and it has been necessary rather to seek for opportunities of effecting economies than of introducing administrative reforms. The chief measures of Sir Rivers Thompson's Government of Bengal have been of the class to which large financial resources are not indispensable. The Bengal Tenancy Act, the prosecution of the Kidderpur Docks, the grant of an elective constitution to Municipal Boards, the inauguration of self-government in the interior, the introduction of competitive examinations for appointments to the Subordinate Civil Service, the appointment of the Commission for the revision of ministerial salaries, and the rearrangement of work and authority in district and divisional offices—all these are measures whose importance is mainlye conomic and political, and which leave little trace on the financial history of the time. Nevertheless funds have been provided for certain reforms and improvements which the progress of the Province had rendered more than ordinarily pressing The establishment of an Agricultural Department has supplied a want to which in other Provinces a much higher degree of priority has been attached, and which the revision of the law of landlord and tenant in Bengal had forced into immediate prominence. The survey of the district of Muzaffarpur has proved a successful experiment, and, it is hoped, will some day be extended to other districts The labours of the Excise Commission have suggested important reforms, and if the sacrifice of revenue which their proposals involved, and which has been cheerfully accepted by the Government, is instrumental in stamping out an insidious social evil, the money will have been laid out to the utmost advantage The increase to the salaries of the Subordinate Executive and Judicial Services has improved the prospects of a deserving body of public servants The appointment of additional judicial officers has supplied the means of a swifter, and therefore of a better, administration of justice. The progressive additions to the grant for primary education have kept pace with the downward filtration among the masses of the desire for mental improvement, and the encouragements offered to European and to Muhammadan education have been acknowledged as equitable measures which had long been felt to be of urgent necessity. The Calcutta Exhibition of 1883-84 was instrumental in spreading a wider knowledge of the raw products of India among the manufacturers of Europe, and Australia, and in acquainting the Native populations of this country with the capabilities of European machinery. In taking over and carrying on the iron-works at Barákhar when private enterprise failed, the Lieutenant-Governor has kept alive an industry which cannot fail to have a great future before it, when the mineral wealth of Chutiá Nágpur and Central India shall have been adequately exploited. The Orissa Coast Canal is a work of supreme importance for the development of the Province of Orissa, and its completion is the surest safeguard against a repetition of the calamity of 1865-66.

Reg No 6407J—720—1 8-87